

ANIMADVERSIONS

ON THE

NATURE AND THE CURE

OF THE

DROPSY.



DR. . M I L M A N 's

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OF THE

D R O P S Y,

TRANSLATED FROM THE LATIN INTO ENGLISH,

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By F. SWEDIAUR, M. D.

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P R E F A C E .

O F T H E

E D I T O R.

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AS the impreſſion of this book is fold, and there does not appear to be any near proſpect, (from the occupation of the Author) of a new edition, I employed ſome leiſure hours of the laſt winter, in giving it an Engliſh Dreſs, not doubting, but that from the approbation with which the original has been received in this Country; as well as upon the Continent, the preſent form of it will render it acceptable, and more generally uſeful. The method recom-

P R E F A C E.

mended in this work, is certainly a considerable improvement in the mode of treating Dropsies; the advantages of which I have myself had the satisfaction of seeing confirmed in repeated instances. The more extensively the precepts therefore of its Author are circulated, the more beneficial they will be likely to prove to the community; to promote the interests of which has been the motive of my present undertaking, as it has been always my study upon every occasion.

F. S.

# P R E F A C E

O F T H E

A U T H O R.

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**I**T is a question which has been lately asked by men of great character, whether in every kind of Dropsy, we should solicitously and religiously abstain from all sorts of drink? In the transactions of the Royal College of Physicians, some histories of dropical persons have been published, who were recovered from an almost desperate state, by a very unusual remedy; a large quantity of diluting drink—Hence a gentleman of great learning and medical skill submits to the public, whether “it may not be, that more cures might be performed

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ed, if the like indulgence (viz. with respect to drinks) were more frequently \* allowed? As in performing the duties of my office abroad †, it happened to me to observe and to note many strong facts relative to this subject, I have thought it my duty to consider and to discuss this question. And I with the more alacrity undertake this task, however unequal I may be to the performance of it, because I have with pleasure perceived, that in these times prejudice and old opinions have not such weight in medical matters, as to prevent some deference being shown to the dictates of experience.

A few years since, physicians carefully kept their patients in the small-pox from  
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\* Vide Sir George Baker's Observations in the second Volume of the Medical Transactions of the College, p. 238.

† Dr. Milman was one of Dr. Radcliffe's travelling Physicians.



the air, lest the cold should repel the matter into the blood. This was the fixed notion of their minds, and it influenced their practice. But alas ! how great was the destruction of lives which arose from it ? Time has at length taught us better lessons ; and guided by experience we have learnt, though late, that nothing favours the eruption of the pustules, or restrains the violence of the disease so effectually, as that cool air which formerly we so much feared.

In the cure of the Dropsy, we have been guilty of an error of no less magnitude, in cruelly and constantly refusing drink to promote the operation of medicines, lest we should thereby increase the disease. Those who have treated the Dropsy have complained, and not without foundation, that their remedies failed of the wished for effect, till BACHER, a physician of some credit in France, disappointed by the ill success of the ordinary means used in those cases, gave

moistening food and drinks with medicines to dropical persons with some boldness, (if people will have it so) but with safety and with success. M. RICHARD, the celebrated physician of his most Christian MAJESTY, has extolled this method of BACHER very highly.\* Many physicians in France have practised it with success. I have seen many persons labouring under a Dropsy cured by Dr. Collin at Vienna, by the assistance of drinks given with their medicines, and I have myself in my practice imitated these methods with success.

Left therefore futile and unexploded theories should be set against facts and experience,

\* L'ancienne Erreur du Regime sec et de l'abstinence de tout Boisson, doit ceder en ce Cas, a l'evidence de Faits et a la superiorité des Raisons qui etablissent la methode contraire. Je ne pretends pas encherir sur les Preuves que M. Bacher a données a ce Sujet, et qui sont consignées dans l'Exposition des differens moyens usités dans le Traitement des Hydropies. V. Observat. de Medicinè des Hopitaux Militaires fait et redigé, par M. Richard de Hautefilrch Chevalier de l'Ordre de St. Michel, &c.

P R E F A C E.

ence, being equally void of fear, or, I trust, of rashness, I purpose to defend this method of cure, by arguments drawn from nature, and from Hippocrates, flattering myself, that these my labours will meet with indulgence from the candid readers, being incited to them only by the desire of rendering service to my country, and of conciliating the favour of the professors of the medical art.

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# ANIMADVERSIONS

ON THE

NATURE AND ON THE CURE

OF

DROPSIES.

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THERE are few diseases which occur more frequently than the Dropsy. It is the consequence of many disorders which impair the health of mankind; the rich and the poor are equally subject to its invasion; it attacks both sexes, and persons at every period of life; nor is its mischief only extensive; it is so fatal in its effects that authors have furnished but few instances of its having been cured. Aretæus many years ago, observed “ That very few people were

were freed from Dropsies ; and that when it happened it was a piece of good fortune to be ascribed rather to the kindness of the Gods than to the assistance of the medical art."

Here several questions will naturally arise ; it will be particularly asked by what means it has happened that medicines should have availed so little against this dire disease ? Is it that the causes of this calamity will not admit of relief ? or is the ill success which has attended its treatment to be attributed to the injudicious methods by which we have attempted to cure it ? These several doubts will be discussed in due order ; and that the subject may be elucidated as much as possible, I shall premise some observations on the nature of Dropsies, and on the causes from which they arise.

The Dropsy is a super-abundant collection of a watery fluid in some cavity of the body. It is here proper to apprize the reader that small arteries accompanied with little veins pervade the surface of every cavity of the body ; the former are calculated to pour out a liquor suited to preserve the parts moist ; the latter to absorb the redundant fluid  
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when it has done its office, and to carry it back into the circulation ; however, if the arteries should pour out an excessive quantity of fluid, greater than what the veins can take up or carry back into the blood ; or, should the quantity deposited by the arteries not exceed the natural and the due portion ; if the veins should be incapable of doing their duty, a morbid collection of a watery fluid will soon necessarily be accumulated ; and this effect is particularly apt to arise in persons, the fibres of whose bodies are of a delicate texture : hence the female sex is more liable to this disease than the male : hence too it happens that young women labouring under the Chlorosis, or obstructions, are extremely prone to the Dropsy.

This disease proceeds too very often from a debility of the vital powers of the heart, induced either by excessive hæmorrhages and losses of blood, or by acute diseases of great length. Although this cause may seem very different from a laxity of fibres, yet is the Dropsy produced by both of them in a manner not very dissimilar ; for the vital powers weakened by great evacuations.

ations of blood, or by severe diseases, will occasion a weakness and a laxity in the simple solids; and on the other hand, a lax state of the simple solids cannot but make the vital powers partakers of their weakness: the debility arising from both these causes will produce this effect, that the watery fluids which by the vigour of the body ought to be expelled from it by the different excretories, will not be so expelled; but remaining within it will gradually fall down and be accumulated in its several cavities. There is this distinction however to be made between the diseases arising from these different causes; namely, that in the Dropsy arising from a lax fibre the solids will have sustained the greatest injury: hence water seems to abound in every part, and the soft and bloated body appears, as it were, enlarged. But when the dropsy is the consequence of great losses of blood, or acute diseases long continued, the solids are not so much impaired; but the heart having lost its force, and the humours being propelled in a languid manner into the extreme vessels, the thin fluids taken for daily sustenance fall by their own weight into the cavities and cellular texture of the body: hence



hence those watery tumours which follow an excessive discharge of blood, or are the consequence of fevers or long continued diarrheas, at first occupy the most dependent parts; the swellings first appear in the legs; the disease afterwards in its progress, is seen in the abdomen, and sometimes even penetrates into the chest.

An impediment to the free circulation of the blood is another, and a more frequent source of Dropsy than those I have already mentioned: this obstruction is formed by various causes, proceeding sometimes from polypi in the heart, or in the larger vessels, and at others from tumours arising within the abdomen itself. Thus Vanswieten relates, “ That in the body of a man who died of the Dropsy, the omentum was found hanging down into the pelvis, and degenerated into a thick kind of bag containing a steatomatous sort of matter which weighed three and thirty pounds!” A scirrhus liver and a diseased spleen are likewise often the occasion of the Dropsy; persons too are very subject to it who are of a scrophulous habit, by which the glands

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of

the mesentery being obstructed, an obstacle will be formed to the return of the lymph from the extremities, and to the free conveyance of it into the circulation; any thing therefore, whether situated within the vessels or placed without them, which straitens or blocks up their cavities, will be productive of this consequence, that the vital fluids being stopped in their course by these obstructing matters in the larger vessels, and finding an easier passage through the small exhalant arteries than through the great veins, will of course insinuate themselves into the cavities of the bodies. The experiments of Dr. Lower will elucidate this subject. “ Having opened the chest of a  
 “ dog on the right side, he put a ligature  
 “ on the great vena cava, and sowed up the  
 “ wound again. Soon afterwards the dog  
 “ languished and died in a few hours. Upon  
 “ opening his abdomen a considerable quantity of a serous fluid was seen floating in  
 “ it just as is observed in persons who die of  
 “ the dropfy.” “ He tied in a similar  
 “ manner the jugular veins. In a few  
 “ hours all the parts above the ligature were  
 “ wonderfully swelled, and the dog died  
 “ in

“ in two days. Upon dissection all the  
 “ muscles and the glands were distended  
 “ and appeared very pale, from the limpid  
 “ kind of serum contained in them. This  
 “ says Lower, is a clear proof, that when  
 “ from the veins being tied, the arterial  
 “ blood cannot pass through them, the se-  
 “ rum is separated and runs off through  
 “ more open vessels and pores adapted to it:  
 “ But the thicker part of the blood on ac-  
 “ count of the small diameter of those mi-  
 “ nute branches, cannot be admitted unto  
 “ them, and therefore stagnates in its pro-  
 “ per vessels:

A remarkable case is mentioned by Willis,  
 of a young man who being given to hunt-  
 ing and other very violent exercises, was at  
 last attacked with a dropsy of the chest.  
 The patient felt as if he had a vessel burst  
 within the cavity of the chest, and the  
 sound of a fluid dropping from the up-  
 per to the lower part of the thorax, was  
 not only perceived, says Willis, by the sick  
 person, but heard by the standers by. How-  
 ever, as this dropping of a fluid and this bro-  
 ken vessel were not seen, and as by Willis's

own confession the disease came on slowly, and did not arise suddenly, I am inclined to attribute to an obstruction of the blood in its course through the lungs. For in a body almost continually agitated by too much exercise and violent motion, inspiration must be performed by starts and catches; and when the air vesicles or bronchiæ of the lungs are not fairly and fully expanded, the blood will have a difficult passage through them, and being frequently accumulated in them, will continually distend their vessels and make way for its thinner part into the chest. Experience furnishes us with cases to illustrate this explanation. People subject to the asthma are very liable on account of the difficult passage of the blood through the lungs to the dropsy of the chest, and even to the ascites and anasarca.

A tenuity of the fluids is frequently reproached with being the cause of dropsies, and authors often ascribe them solely to a superabundant proportion of watery particles in the blood. As a proof of it, the experiments of Hales are often quoted; by which it is pretended to be taught, “ that  
a re-

“ a redundant portion of water in our hu-  
 “ mours will not be driven through the ex-  
 “ tremities of the arteries into the veins,  
 “ but that it will pass into the cavities of  
 “ the body and produce a dropfy, even  
 “ though the water be not propelled with  
 “ a force greater than what the heart exerts  
 “ in its natural state.” These experiments  
 appear to me to be extremely fallacious. For  
 the power with which the heart propels its  
 fluid, has not been estimated with any de-  
 gree of accuracy. And if we consult na-  
 ture instead of such experiments, it will be  
 evident, that if the proportion of water  
 in the blood be increased, whilst the power  
 of the heart to propel the fluids is intire,  
 and no way impaired, the redundant water  
 will be expelled through the pores of the  
 skin, or through the kidneys : we shall then  
 only have reason to fear its running into  
 the cavities of the body when the force of  
 the heart shall have been previously weak-  
 ened by such causes as have been already  
 mentioned to occasion dropfy. For what  
 purpose then are the experiments of Schult-  
 zius quoted to this point ? He indeed gave  
 a dog water ’till he became dropfical. But



let it be remembered at the same time that he first bled him 'till he almost fainted, (ad deliquium prope) and then oppressed his weakened powers with this deluge of water. It is thus that persons become dropfical, who having been exhausted by labour or disease, drink great quantities of any watery fluid. Hence it was long ago observed by Hippocrates, that persons who after a very long journey, meeting with rainy and stagnant waters, and drinking them, frequently fall into Dropsies. The late Dr. Fothergill mentions the history of a man who had an almost incurable degree of anasarca, from having drank for the space of a month twelve pints of barley water a day to cure him of a fever. If during the rage and height of the fever only he had taken this remedy, he would probably have felt no inconveniences from it. For at the beginning and during the increase of fevers, the Italian physicians throw in great quantities of water; nor do they fear a Dropsy from what they call their “*diæta aquea*,” But it may easily happen that a thing may be beneficial during the violence of a disorder, which may be prejudicial in its decline; and when the

strength of the body has been exhausted by it. It is therefore no ways extraordinary, that a man who had been gradually weakened by a fever and who continued to drink twelve pints of water every day for a month, should have been attacked with a dropsy.

Whilst the powers of the body are entire, so far will any super-abundant water in the blood be from being deposited in any of the cavities of the machine, that if an aqueous fluid be thrown into any cavity of a body not affected with a laxity of fibres or any of the other causes of Dropsy which I have mentioned, it will soon disappear from that place, and passing by absorption into the blood will be carried by the excretories out of the body: this assertion is strongly proved by the experiments of Dr. William Musgrave, who by a siphon injected four ounces of warm water into the right side of the chest of a live dog; a difficulty of respiration arose in consequence of it, and a degree of debility; but these inconveniences soon abated, and in the space of a week the animal was as well as ever; after-

wards he injected sixteen ounces of warm water in a similar manner into the left side of the thorax of the same dog, the respiration grew difficult, the animal was somewhat heated and had palpitations of the heart, within a week the dog was quite well: afterwards he injected eighteen ounces of water into one side of the chest, and six into the other, the same symptoms followed, but they went off sooner than before, for at the end of five days the dog was perfectly well. Dr. Musgrave observed at the same time that the urine made by the animal during this period exceeded much its usual quantity. We may conclude therefore that the three great sources to which all Dropsies may be traced, are either a laxity of fibres, a considerable weakness produced by excessive evacuations, great losses of blood, or by acute diseases of unusual length, or by an obstructed circulation.

The pre-disposing causes of the Dropsy are many and various; whatever relaxes the solid parts, or promotes the accumulation of serous humours in the body, inclines people to this disease; a slothful inactive kind  
of



of life, moist atmosphere, and wet seasons, are favourable to its production; people living in low damp situations are more subject to it than those who inhabit more mountainous countries; whatever is calculated to produce a defect in the viscera, or to occasion a gradual increase of obstructions in any part of them, is likely to have the same effect; hence it happens that they are observed to be particularly inclined to it who live upon a hard and a viscid kind of food, namely, the poor who live upon a coarse kind of bread, and children who are kept upon an unwholesome viscid sort of diet; men who indulge in the excessive use of spirituous liquors are in a very precarious situation. Hence Sydenham remarks, that drunkards are more frequently afflicted with this disease, though of a cold nature, than other persons.

So much for Dropsy in general; it remains that we now say something of its several species, and of those particularly, the Ascites and Anasarca, which will be chiefly the subject of the following pages.

The

The ascites is a super-abundant quantity of a watery fluid collected in the cavity of the abdomen. Water may stagnate or exist in the cavity of the abdomen in three several ways; it may either surround and wash the bowels, and in this mode it is aptly termed the Abdominal Dropsy; or it may occupy the space which lays between the abdominal muscles and the peritonæum, which I shall therefore call the Peritonæal Dropsy; or the watery fluid may form a receptacle for itself in little bags, or in the cavities of glands, and which therefore is properly enough denominated the Incysted Dropsy. Mead and other physicians of great note have maintained, that the Dropsy sometimes is seated in the duplicatures of the peritonæum. But I believe it is now agreed amongst anatomists that the peritonæum is not a double but a single membrane. A fluid deposited in the cellular texture which covers the anterior part of that membrane, probably led those gentlemen into this error.

The abdominal Dropsy, or Ascites of the cure of which we shall by and by speak,  
generally

generally discovers itself by the following symptoms. The patient is weak and languid, is apt to be out of breath on using exercise, and bears motion with difficulty. The belly swells, and on being struck yields the sound of water collected and moved within it. When the belly is pressed or squeezed the respiration grows difficult; there is almost a constant thirst, which at first however is not great. The urine is small in quantity, thick, and of a high and reddish colour. The pulse is small and quick. The upper limbs are emaciated, the muscles are thin, at length a little fever arises, which increases as the disease advances, and is at last extremely high and distressing.

This disease is easily distinguished from peritonæal Dropsy. For the latter approaches gradually and increases slowly, and the belly does not swell equally in every part, as it does in the abdominal Dropsy; but a circumscribed tumour appears chiefly in the forepart of the belly, the shape of which does not vary as the situation of the body changes. Whereas in the abdominal Dropsy, unless the abdomen be excessively dis-

distended, the situation of the tumour changes, just as the patient inclines to one side or the other. In the like manner it may be distinguished from an incipient tumour of the ovarium, which being circumscribed, occupies the lower part of the abdomen towards one side, and has generally some pain accompanying it, or which has been the fore-runner of it. The emaciation of the upper limbs is particularly remarkable in the abdominal Dropsy. It is not so observable in the peritonæal or in the incysted Dropsy. In these the thirst is not so very troublesome, nor is the urine much changed. In the first very little is made. In these though the tumour is very large, the chest and the lungs are not much oppressed: In the first the respiration is difficult and laborious,

In the Anasarca the hydropic fluid is poured into the cellular texture under the skin, the Anasarca generally accompanies the Ascites. It proceeds from the same causes and requires the same method of cure. It is therefore unnecessary that I should say much upon the subject of it.

Having



Having explained the causes of the Dropsy, we shall now proceed to deduce our prognostics from them. The cases of those persons seem to be desperate whose disease arises from a schirrus of the liver, of the spleen, or of any of the other viscera, as well as these likewise whose disease originates from a fault in the lungs. Nor are they in less danger whose bodies are filled with water from a lymphatic vessel bursting within the abdomen and continually pouring out it's fluid. No hope can be entertained of the recovery of those patients who have polypi in the vessels or tumours in the abdomen, compressing the veins and other vessels. It will be with difficulty that such persons are restored whose mesenteric glands are obstructed either by a scrophulous habit, or any other cause. If we can succeed in removing the obstruction of the glands, the Dropsy will yield very readily. They are not so dangerously affected who become dropical without any preceding disease: or if, notwithstanding a preceding disease, the strength be not much impaired, and the respiration free, and the patient suffer no pain, there is good ground for very lively hope. Where  
a fever

a fever follows a great loss of blood and a dropſy comes on, the ſick perſons almoſt always die, and in a ſhort ſpace of time. Such perſons are moſt frequently cured who become dropſical after a fever, which no loſs of blood or hæmorrhage has preceded.

In the cure of this diſeaſe there are two indications; the firſt is to expel the redundant water; the ſecond to prevent a new accumulation of it. Before we proceed to a detail of the remedies for it, it may be proper to obſerve that there is a law in the animal œconomy by which it is eſtabliſhed, that any great evacuation procured from one part will occaſion an abſorption of the fluids lodged in another, and theſe will be derived to the organ irritated by the medicine, and carried out of the body. Hence it happens that the watery humours depoſited in other cavities will be drawn to the bowels by purgatives, or to the kidnies by diuretics, and expelled. But in order to remove this complaint, we muſt not only excite evacuations by the ſeveral emunctories; to accompliſh our purpoſe, they muſt be conſtantly promoted and ſupported 'till the redundant fluid

fluid is entirely discharged. For this reason in the use of purgatives for the cure of the Dropsy, Sydenham advises us to take particular care “ that the waters be drawn off “ as quickly as the strength of the patients “ will admit, and that they be purged every “ day ; unless the excessive weakness, or “ the rough operation of a preceding medicine should require an intermission of it “ for a day or two. For if the purgative “ be not repeated but at considerable intervals, however copious the discharge may “ have been, the delay will only occasion “ a re-accumulation of water.” But there is this inconvenience which attends this method of cure, that tho’ the waters be entirely thrown off, the strength of the patient is so reduced by it that the disease generally returns in a very short period. Our chief hope therefore of curing Dropsies is placed in remedies which have the virtues of drawing off the waters gently, and gradually by the kidneys. But the misfortune that the operation of these medicines is very precarious ; Dr. Mead long ago observed, that that part of medicine which was directed to increase the secretion

tion of urine, was particularly lame, and defective. A certain French physician whose name was Bacher, undertook some time ago to correct the weak and uncertain powers of diuretics, and by rendering their operation more certain and efficacious, he was very successful in the cure of dropsies. When from the province in which he practised his reputation had reached the court, his Christian Majesty commanded his physician Monsieur Richard to have a trial made of the remedy and methods of cure used by Bacher. To be more certain of a just report, Richard committed this business to the care of four physicians living in remote parts of the kingdom, and no-ways connected with Bacher. All these physicians bestowed great praise on the medicine, and on the methods used by Bacher, and sent journals to the court of the cases of persons who had been cured by them. The remedy therefore, which had been kept a secret, was bought at a great price by his Christian Majesty.

A great many histories of patients cured by Bacher have been published: but tho' as far as I know, they have never been questioned,



tioned, I shall say nothing of them. In a matter of this sort it is better to use other people's testimonies. To avoid being tedious, I shall only quote the journals of the Doctors Dehorne and Daignan, men the most respectable for their rank, reputation, and veracity.\* They who desire more particular information upon this subject, may consult the books containing the journal from which I have copied these documents. Dr. Daignan gave Bacher's remedy to eighteen patients divided into three classes according to the degree and severity of the complaint. The first class comprehended those patients who laboured under a general anasarca, the consequence of intermittent fevers. The second class, those who had an anasarca, and a degree of ascites from long continued fevers. These twelve patients were entirely cured; nor indeed is the cure of Dropsies from such causes a matter of difficulty. In the third class we have the history of those patients who having been weakened by various and long illnesses, were at-

\* V. The observations at the command of the court, on the effect of the tonic pills, by M. Daignan, physician in ordinary to the King.

tacked with most severe degrees of the anasarca and ascites ; of these six persons four were cured, two died. Upon opening the body of one of them, each cavity of the chest was filled with water of a reddish dark colour. The lungs were diseased. There was a polypous concretion in the right ventricle of the heart. The liver and the spleen were hard and much exceeded their natural size. The glands of the mesentery were much obstructed. The liver and pancreas of the body of the other patient were schirrous. The spleen was hard. The histories of eight patients are related by Dr. Dehorne, six of whom laboured under an ascites and anasarca; two under the ascites only; four of them were restored to health; three died; one was freed from the Dropsy, and sent to drink some mineral waters, but a few days afterwards he was brought back speechless and died. The histories of more than twenty persons cured of Dropsies by different medicines and different physicians, are published by M. Richard; and, what may appear extraordinary and is certainly unusual, there is this circumstance in common to all of them, that they used a moistening

ening diet and drank copiously to quench their thirsts and to promote the operation of their medicines.

The pills (the composition of which are subjoined in the appendix) consist of an half a grain of the extract of black hellebore each; ten of these are to be taken at a time, and the same dose is to be repeated three times at the interval of an hour. At first they prove laxative, afterwards they draw off the waters and remove the complaint by provoking a great discharge of urine. Bacher is of opinion, that by his peculiar mode of preparing the hellebore, the deleterious qualities which have deterred physicians from prescribing it, were destroyed. But does not the spirit with which our tincture is made, extract and dissolve all the properties of the plant? Is not that tincture recommended by Mead as a safe and a beneficial medicine? Does he not praise it as an excellent emmenagogue? Does not Friend extol hellebore as an excellent diuretic? What the ancients have said of their hellebore, Bacher applies to his, and speaks of

it as a formidable medicine, 'till it has been rendered mild by his preparation of it, and yet he uses the same plant as we do; namely, the *helleborus niger*, foliis angustioribus, flore roseo, *tournefortii*. But the description of this plant by no means agrees with that used by the ancients. It was the opinion of a late ingenious physician, that the hellebore of the ancients was no other than that described by Tournefort under the name of the "*helleborus niger orientalis*, amplissimo folio, caule præalto, flore purpurascens." For this species flourishes about Mount Olympus, and in the island of Anticyra, formerly so celebrated for its hellebore. A scruple of this plant, says Tournefort, excites convulsions: The other plant taken in a dose from fifteen grains to an half a drachm only purges strongly. The pills of Bacher of which each dose contains ten grains, repeated three times at the interval of an hour, at first prove laxative and afterwards only prove diuretic. With what justice does Bacher ascribe a peculiar (not to say, a specifick virtue to his remedy? the dropical persons whose histories are related by Richard using

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different medicines, but the same regimen were treated with as much success as the patients of Bacher.

This practice prevailed in France before he left England. When I arrived at that celebrated school of physic Vienna, and visited its hospitals, I was surprized at the number of dropical persons which were cured in the hospital called *Pazmanianum*. The physician of that hospital Dr. Callen, used various medicines, sometimes the vitriolated tartar, sometimes the colchicum autumnale, or meadow saffron, sometimes the cream of tartar and a variety of other remedies. But these very diuretics which I had often seen elsewhere, produce disappointment, had almost always the effect of increasing the urine, although not always the power of removing the disease. We should remark however, that here likewise watery diluting drinks were given freely, ad libitum, to the patients. This book would grow to a very large size if I were to enumerate the histories related by authors of dropical persons cured by medicinal waters. We have already said sufficient to shew how



much diluting drinks increase the power and promote the operation of diuretic medicines, and of course how much they contribute to the cure of the Dropsy.

These facts being premised, let us now enquire whether the practice of the foreign physicians which we have mentioned, be agreeable to the rules given us upon this subject by Hippocrates. This sagacious physician had two methods of curing the Dropsy; the one by medicine, the other by diet only. That his doctrine may be rightly understood, it will be proper for us to explain some of his physical principles or opinions. “ The peculiar elements of our  
 “ body according to Hippocrates, consist  
 “ of four humours; and humidity and cold-  
 “ ness, heat and dryness, are common pro-  
 “ perties of them. Hippocrates denomi-  
 “ nates the elements from these qualities of  
 “ them, and conceives that health depends  
 “ upon the due proportion of these, and  
 “ that disease is constituted by the excess of  
 “ any of them, and that the remedies of  
 “ diseases must be derived from the quali-  
 “ ties, contrary to those which are excess-  
 “ five.

“ five. Where humid qualities or elements  
 “ are redundant, they must be corrected by  
 “ those in which the dry elements or quali-  
 “ ties abound. Where cold elements or  
 “ qualities are in too great quantities, they  
 “ must be cured by those things possessed of  
 “ hot qualities.” For not only our hu-  
 mours, but every thing in nature according  
 to the opinion of Hippocrates, consist of  
 the humid and the dry, of the hot and the  
 cold ; and therefore every thing according  
 as these qualities or elements prevail in it,  
 is either moistening or drying, heating or  
 cooling. Of the wines ; some are humid,  
 others dry ; some cold and others hot ; the  
 dark coloured austere wines are drying. The  
 white austere wines are heating. The thin  
 sweet wines are moistening. The acid  
 wines are cooling. Hence the true sense of  
 the old axiom so frequently mentioned by  
 the ancients, *humidum per ficcum curan-*  
*dum* “ the humid is to be cured by the  
 “ dry,” will appear obvious, and clear.  
 Let no one assume a right from hence of re-  
 fusing drinks to Dropsical people ! For fluids  
 are not prohibited by this expression : but  
 those only which moisten. Such fluids as

have a drying property are said by Hippocrates to be particularly adapted to those cases. Therefore in the diet suited to the cure of dropfical persons, he commends the use of the dark austere wines for this express reason, that such wines are calculated to promote the strength and dryness of the body. But when he intends to cure the Dropsy with medicines he gives ptisans and broths.

The reasons of the latter practice may be collected from the general laws which he has laid down for the exhibition of medicines. It will be proper therefore to state these to the reader. First, he taught that broths or supping kind of diet are to be given in all diseases, either a ptisan or a potage made of millet, or flour, or barley broth, either the one or other, as the peculiar nature of each disease may require. Drinks are likewise to be used: If you wish to procure evacuations by the bowels or by the kidneys, the sweet wine or the aqua mulsa, composed of wine, water, and honey are to be given. If you wish to produce an astringent effect, the white thin watery wine. If to strengthen, the dark  
austere



austere wine. To such as dislike wine, Potions prepared and described in the treatise on medicines are to be exhibited.—

“ The precept of Hippocrates that when  
 “ evacuations are to be procured, the body  
 “ of the patient is to be previously moist-  
 “ ened, whether it be by vomit or stool  
 “ that the discharge is to be made,” is  
 not according to Galen confined to acute  
 diseases, but it is to be understood in the same  
 sense in chronic diseases likewise. Therefore,  
 previous to the administration of purga-  
 tives, Hippocrates ordered the bodies of the  
 patients to be moistened by food, by rest,  
 by warm fomentations or some other me-  
 thod. What sorts of food are calculated to  
 answer this end, he particularly specifies.  
 “ When, says he, you wish to moisten the  
 “ body of a patient with food, give a sort  
 “ of hasty pudding and fish. The pieces  
 “ of sea fish should be cut small and boil-  
 “ ed. The flesh of young animals, as the  
 “ kid, &c. boiled, is proper. The beet-  
 “ root, the spinach, the sorrel, the gourd  
 “ if the time of the year will admit; the  
 “ parsley, the herb anise or dill, and the  
 “ old white watery wine, with honey. But  
 “ if you wish to dry the body, give bread  
 “ and

“ and dried fish, and every thing of a dry  
 “ or hot quality, and the muscular parts  
 “ of animals, and the rock fish. Of the  
 “ pulses, rue, thyme, organy or bastard  
 “ marjoram; the dark austere wines :  
 “ Let the victuals be dressed with salt and  
 “ cummin; of other seasoning use as little  
 “ as possible.” The same precepts which  
 Hippocrates delivered in a simple and neat  
 style, Galen gives, but mixed with many spe-  
 culative opinions; and he adds “after the pur-  
 “ gative medicine has been taken, it is pro-  
 “ per to drink ptisan, as Hippocrates says.”  
 He subjoins many reasons why Hippocrates  
 recommended ptisan on this occasion, but  
 I do not think it necessary to repeat them.  
 It is sufficient for our purpose that Hippo-  
 crates commended broths or fluid things  
 (Sorbitiones) in all diseases; that he parti-  
 cularly commanded drinks to be given  
 whenever we wished to procure evacuations  
 by the bowels or the kidneys; that before  
 he gave purgative medicines he ordered the  
 body to be moistened; that when the me-  
 dicine had been taken, he gives ptisan to be  
 drank. Our duty and the support of the  
 argument makes it necessary for us to show  
 how

how those general precepts were applied and put into practice in the particular cure of the Dropsy.

Hippocrates referred a great part of Dropsies to a pituite or phlegm, and indeed according to Lommius, Mead, and other physicians of great note, the Leucophlegmatia, (which is only an inveterate kind of pituite or phlegm) and the Dropsy are synonymous. However, Hippocrates considered the Leucophlegmatia rather as a state inclining to Dropsy than an actual Dropsy; but as Hippocrates used the same remedies in curing the Leucophlegmatia and the Dropsy, the distinction he wishes to make between those two diseases is not of great consequence, nor should it hinder us from thinking those things beneficial for the latter, which he particularly recommends for the former. The first quotation therefore which we shall make from Hippocrates will be from that part in which he speaks of that species of the Dropsy the Leucophlegmatia. “ If the belly be not loose of itself, “ it will be necessary to purge by giving “ the herb cneorum, the hippophaes, the  
“ granum

“ granum cnidium, or the lapis magnesi-  
 “ us. After the purge three quarters of a  
 “ pint of a pottage made of lentils, or  
 “ twice that quantity, (and there should be  
 “ garlick boiled in the pottage) the rich  
 “ beet root, with some dried barley flower  
 “ sprinkled upon it, the dark austere wine  
 “ should be drank the day after, in the  
 “ morning the patient should walk twenty  
 “ stadia \*. When he returns let him eat  
 “ dry toasted bread and garlick, and let him  
 “ drink the same wine; then let him walk  
 “ thirty stadia, and at the proper time let  
 “ him take as much for supper as he had  
 “ been accustomed to eat for dinner. It will  
 “ be seen in thirty days whether the com-  
 “ plaint be fatal or not. The thirty days  
 “ being past let him proceed in this manner.  
 “ On the first days for pottage let him  
 “ take the lentils boiled in vinegar and an  
 “ acid ptisan. Let him drink aqua mulsa,  
 “ with a small quantity of dried barley  
 “ flower, in order to prepare the body for  
 “ taking medicines.” † In the first place, if  
 the

\* A Stadium is one hundred and twenty five paces.

† *ἵνα γούν ωργισμενον το σωμα η*. These words Charterius translates “quo sane turgat Corpus,” in order that the body  
may



the body be not open, Hippocrates procures evacuations by medicines. After the purge he gives a pottage of lentils in which garlick has been boiled ; then he recruits the force of the body with the austere wines, the properties of which are to strengthen and to dry. Afterwards he recommends exercise and gives bread and garlic boiled, and some of the same austere wine. He advises the patient to go without his dinner, and to walk thirty stadia, that all the morbid humours may be expelled by exercise before

may swell, and Fæsius “ in order that the body may be softened ;” but perhaps neither the one nor the other interpretation is just. *οργίζω* signifies the same as *οργαζο*, I incite, I make ready, *ετοιμον ποιω*. Hefschius explains *ωργαζο*, *εν ετοιμω ην*, it was in readiness, and *οργασαι πληρον*, *ετοιμον παρεχειν*, or *ετοιμασαι*, to make ready, or to prepare. Thus Aristotle treating of the dry sweating Bath says : *Το δε ολιγον μαλλον την σαρκα ανηην, ως την τε αριστην και τα εντος καθαπερ οργαζει προς την διακρισιν και εξαγωγην*. That it in some measure extenuates and relaxes the flesh, and prepares as it were things within the body for a separation and expulsion. *Οργισασθαι* as used by Hippocrates, Erotianus explains *ορμην εχειν προς τι*, sicut *η γη dicitur οργαν προς την εκβολην το καρπου*, to have a strong disposition to any thing, as the earth is said to swell, or to have a strong disposition to throw out its fruits ; to which he adds, that the word *οργιζασθαι* was used when humours were brought to a separation, and prepared for expulsion, *το τις παρασκευασειν αγαγειν τα υγγρα και προς εκκρισιν ετοιμαζειν*. This passage, therefore, would be better translated, “ that the body may be prepared for taking medicines.”



before the body is filled with fresh juices from food. In like manner in the fourth disease, which he describes of the kidneys, and which according to his idea proceeds from bile and pituite or phlegm; in order to exhaust and expel all the morbid humours, he diminishes the patient's food in proportion as he increases his exercise. He then recruits the body thus emptied by gradually increasing his food, and in the same proportion decreasing the length of his walks. These strong degrees of exercise in the Dropsy may serve the purposes of strengthening the body, of forcing the watery humours through the pores of the skin, of expelling all superfluous matters by the various excretories. Galen observes, that "as exercise is disposed to dry the body, "so rest, which is a freedom from exercise, "is calculated to keep humid particles "within it." Hence rest is always ordered before the exhibition of purgative medicines, as contributing to moisten the body. But if the disease should not be conquered by exercise, nor come to a crisis in thirty days, then Hippocrates endeavours to cure it by medicines, and therefore he advises

" the

“ the ten first days let the patient observe  
 “ these rules. On the first days let him  
 “ take broth or pottage and ptisan.” He  
 likewise orders him to drink the aqua  
 mulsa warm, for the express purpose “ of  
 “ preparing him for the taking his medi-  
 “ cines.”

Hippocrates in the subsequent chapter teaches the method of treating a Dropsy arising from a thin kind of phlegm or pituite. This disease he advises us to cure by a dry diet. The particular diet which he prescribes for this purpose we shall mention hereafter. With this diet he recommends the dark austere wine, and adds “ but if he  
 “ be restored by these things it is sufficient :  
 “ If he should not be recovered, give him  
 “ the cneorum or the juice of hippophaes,  
 “ or the granium cnidium; and after the  
 “ purge let him take two heminæ (or three  
 “ quarters of a pint) of a pottage of lentils. Let him eat but little bread, and of  
 “ the dark austere wine let him drink but  
 “ little. Let him drink the purging medicine twice a day till his belly becomes  
 “ soft. If there should be any water or  
 “ tumour in his scrotum, his thighs or legs,  
 “ let

“ let him be scarified with a sharp instru-  
 “ ment, and let there be many incisions  
 “ made.” If this be done he will soon be  
 restored. “ Here it may be asked why  
 “ Hippocrates, who in the middle of this  
 “ chapter recommends wine with food in  
 “ an unrestricted quantity, and at the end  
 “ of it advises a pottage in a quantity of  
 “ three parts of a pint twice, should in  
 “ the latter case allow bread only in a small  
 “ quantity, and a very small portion of  
 “ wine? When he endeavours to cure  
 “ a Dropsy arising from a thin pituite by  
 “ a dry diet, he recommends bread and the  
 “ dark austere wine in a quantity which he  
 “ does not limit.” For both these sub-  
 stances as they possess dry and hot qualities  
 according to his theory, are properly opposed  
 to the humid and frigid nature of pituite.  
 If, says Hippocrates, he be restored by those  
 articles which constitute the dry diet, it is  
 sufficient: If not, purgatives, and pottages  
 made of things which possess humid quali-  
 ties are to be given, in order that the body  
 be moistened and yield more readily to me-  
 dicines. After the purges he sometimes  
 give with food the austere wine in a quan-  
 tity

tity not limited. That when the stronger purges are prescribed, both before the exhibition and during their operation, he gives them bread and wine in small quantities; nor does he observe this rule only in Dropsies. When purges are given in other diseases, he holds it equally valid. Thus in the disease of the spleen, when he prescribes hellebore and the granum cnidium, he allows only small portions of bread and wine. If when he had given the granum cnidium, and the juice of the hippophaes twice a day to a dropfical person, he had allowed a great deal of bread and much wine with the pottage, which moistens, and with the purgatives which require moistening things, he would have exhibited things at the same time contrary in their natures and properties, and disagreeing with one another. Bread and wine have already been enumerated among those things which have dry qualities. “ When you wish to dry the  
 “ body give bread, and victuals roasted and  
 “ dry, and all such as have dry qualities.” And elsewhere Hippocrates says, “ warm  
 “ bread occasions a sudden repletion, both  
 “ because it has dry qualities, and because  
 “ it does not easily pass off by stools.”

D

And



And again “ warm bread dries, but cold bread not so much : It rather tends however to make people lean.” Wine likewise dries, and is apt to render people costive. These are the opinions which induced Hippocrates to allow but small quantities of bread and wine when he gave purges twice a day. They who like Vanswiëten and others, have inferred from this text, that Hippocrates never gave but little wine to dropical persons, discover (as will appear more particularly hereafter) very little skill in the doctrines of the venerable sage of physick. It might with equal propriety from hence be argued by them, that bread is hurtful to dropical people, and never to be taken according to Hippocrates, but in small quantities. For bread is as much prohibited as wine, when purges are given twice a day ; and yet when he attempts to cure the disease by a dry diet, he praises both of them, as being calculated to promote the strength and dryness of the body.

In the next place, Hippocrates treats of the Dropsy of the lungs, or chest, which he cures with the Paracentesis ; then speak-  
ing



ing of the Dropsy from the liver, he says,  
 “ the Dropsy arises from the liver when  
 “ there has been a defluxion of pituite  
 “ upon it; and the liver has been rendered  
 “ humid from it. At first indeed it excites  
 a heat in it, and the liver seems as if it were  
 inflated; afterwards it is filled with water, and  
 the disease is seen in other parts of the body;  
 a swelling arises in the legs and feet; the  
 liver becomes hard and is enlarged; under  
 these circumstances, if at the beginning of  
 the disease there is any pain in the liver,  
 give the bastard marjoram, and the juice of  
 the master-wort macerated in half a pint of  
 white wine, and a cup containing four he-  
 minæ of goats milk, with a third part of  
 the aqua mulsa. The first ten days let him  
 abstain from meat; these will decide whe-  
 ther the disease be fatal or not; let him  
 take the cream of the ptisan boiled, and  
 mixed with honey; let him drink the white  
 Mendæan, or any other sweet white wine;  
 but when ten days are passed, let him eat  
 meat only, the flesh of fowls roasted, and  
 even the meat of young animals boiled;  
 and of fish let him use the galæos and tor-  
 pedo; let him drink the same wine. The

first ten days whilst the liver is affected, Hippocrates advises an abstinence from meat; but he gives the bastard marjorum bruised with the juice of the master-wort and goat's milk, in a quantity of four heminae; and a third part of the aqua mulsa, to render the bowels loose. He thinks the cream of ptisan with honey, and the sweet watery wines suitable on account of the disease in the liver, for they are moistening, detergent, and diuretick: but after ten days, as if he were still apprehensive on account of the heat in the liver, he qualifies the meat of fowls with the flesh of young animals, and allows the same wine; for the flesh of young animals and the watery wine are moistening, and correct inflammation. Hitherto Hippocrates has only spoken of the anasarca of the legs and feet arising from the liver. But in the following chapter he says, “ if an ascites arise from  
 “ the liver, and the water be poured into  
 “ the abdomen, it must be treated with the  
 “ same medicines, the same drinks, the  
 “ same food, the same exercise as the former affections; but let him drink the  
 “ dark

“ dark austere wine.” From this passage it evidently appears, that Hippocrates, so far from refusing drinks with medecines to persons labouring under the ascites, recommends the same as to those in an anasarca, with this difference, that instead of the white watery wine, he gives in the ascites the dark austere wine, as being endowed with drying and strengthening properties. Hippocrates proceeds to speak of the paracentesis, or tapping, and says, “ But if the “ water be separate from the liver, where “ it presents, apply an actual caustic, and “ draw it off; then treat this patient as the “ others.” It was the opinion of Hippocrates, that a Dropsy arose from the liver, when there had been a deposit of pituite or phlegm upon it; and that it had thereby been rendered humid; but he advises us to draw off the water when it evidently fluctuates in the abdomen. Dr. Fothergill likewise recommends the operation early, and discourages its being postponed to a late period of the disease. The objection to this proposal has been, that if the abdomen be perforated before it is distended greatly, there may be some danger of wounding the

intestines; this objection, however, will fall to the ground, if the opening be cautiously made with a small lancet or knife. Hippocrates would have it done with a caustic, and the water drawn off gently. He predicts certain death from a contrary method; they, says he, who have imposthumes, or are dropfical, and have the pus or water let out all at once by a caustic or the knife, die; and Galen in his commentary on this text, says “ Erasistratus has  
 “ written acutely and copiously on the subject of dropfical persons; and he declares  
 “ it to be confirmed by experience, that the  
 “ evacuation of the waters all at once  
 “ brought on fevers and death.” Celsus is very favourable to the paracentesis, for though, according to him, the discharge of the water does not cure, yet it makes room for the operation of medicines which it would prevent, if suffered to remain. He relates the various and most approved methods of performing the operation, and tells us why the caustic should be preferred to any mode of cutting. “ Some, says he,  
 “ are accustomed to make the opening four  
 “ fingers breadth from the navel below it  
 “ towards



“ towards the left side; some to perforate  
 “ the navel itself; some destroy the skin by  
 “ a caustic and cut through the other inte-  
 “ guments, because that which has been di-  
 “ vided by a caustic does not heal so soon.”

He makes the wound with a small knife, a  
 third of an inch broad, and adds “ that into  
 “ the aperture a leaden or brass pipe is to  
 “ be inserted, and the water let out through  
 “ it; and when the greater part has been  
 “ drawn off, the pipe is to be stopped by  
 “ some lint, and left in the wound; if it be  
 “ not made with a caustic, three quarters  
 “ of a pint are to be drawn off on each fol-  
 “ lowing day untill it be all discharged.”

Has not the operation of the paracentesis  
 proved unfortunate in these latter times,  
 because it has been deferred too long, and  
 performed injudiciously †? It has been the  
 last resource, and the patients are almost

† Tapping, though necessary in certain cases, is never-  
 theless a resource as feeble as that of Hydragogues; and we  
 know but too well, that that operation which ought not to be  
 practised but when it is really necessary, since it cannot re-  
 move the causes, is almost always followed by an effusion more  
 abundant, and less curable, every time it is repeated. V.  
*Observat. de Medicinæ fait et redigé par M. Richard, vol. ii.*  
 p. 361.



dead before it is prescribed at present ; and when it is ordered, the waters are not drawn off gradually, but all at once ; which is probably the occasion of a speedy return of the disease. For the vessels being suddenly deprived of the pressure and support of the waters surrounding them, easily give way to the humours impelled into them by the heart, and the waters are of course soon accumulated again.

That sort of bandage invented and described by Professor Monro (v. the medical Essays of Edinburgh) which, before the operation, is bound round the abdomen, and drawn tight as the water is discharged, is very beneficial in preventing the syncope, which is apt to arise from the blood rushing into the vessels, which were supported by the waters, and thereby derived too copiously from the brain. But it may perhaps be doubted whether any external compression of the abdomen can compensate for the pressure and support of the internal vessels by the waters surrounding them on all sides. This bandage would probably be much more useful if some of the waters were suffered  
to

to remain for a time, and were afterwards to be drawn off. For by the joint help of the bandage, and part of the waters, the vessels might gradually be enabled to contract and to oppose the transmission of the thin humours; but, it will be said, if the tapping be performed after the manner of the ancients, if the waters are to be drawn off at different times, the canula must remain in the wound, from which an inflammation will be apt to arise round it from the contracted integuments of the abdomen rubbing against the hard substance in the act of respiration. If the canula be removed, the small wound will close, or at least will contract so as not to admit it's introduction again. From hence many inconveniences will arise, if the canula cannot remain in the wound without great disadvantages, why should we not follow the advice of Cœlius Aurelianus, and make repeated openings into the abdomen. Authors state another objection, and are apprehensive of putrefaction being accelerated by the free access of air. For although the waters in the abdomen may not be putrid from being secluded from the air, yet they are often so near it that the admission of the air to them soon renders them so; but if the

oper-

operation be performed with proper precautions, if as the water flows out, the cavity of the canula be stopped the air cannot enter, and no mischief can thereby arise. In a Dropsy of the chest, Lower and Willis left a silver canula in the wound of the side, and drew off the water at different times. If this may be done with safety in the Hydro-thorax, I conceive it may be undertaken with equal safety and propriety in the ascites: Relying therefore on the example and the authority of the best physicians, in the case of a woman who had undergone the operation of tapping in the ordinary way before, and whose situation was almost desperate, I ordered the canula to be left in the wound under the precautions before mentioned, and the water to be drawn off at three different times. Some inflammation indeed arose at the edges of the wound, but it soon disappeared, and the wound healed; the swellings of the feet and legs, as well as of the belly being dispersed, at the end of two months she recovered and left the hospital. Whether the return of the disease will be prevented, does  
not

not yet appear, \* but these conclusions may be fairly drawn from the preceding case: First, that an inflammation, if it should arise is not very formidable; and secondly, that if proper precautions be taken to stop the canula properly, there is no danger of air getting in.

In the twenty-seventh chapter, Hippocrates treats of the inflammation of the spleen, and of the Dropsy arising from it. First he teaches us how to remove the inflammation, and then adds “ If a Dropsy should  
 “ arise from it, it must be treated with the  
 “ same things and in the same manner as  
 “ the former ones.” We now proceed to consider what Hippocrates has said upon the subject of the universal Dropsy. “ This  
 “ Dropsy proceeds from these causes, when  
 “ any one after a long journey meets with

\* Dr. Milman informed me that the abdomen of the woman whose case is mentioned above, did not fill in two years after her quitting the Middlesex Hospital, though after tapping in the ordinary way she had once filled in ten days. She was at this period induced to apply to another Hospital, having in her visits to the Middlesex Hospital to get medicines as an out-patient after being discharged from the House, been uncivilly treated by some of the servants.

“ rainy



“ rainy water, and drinks greedily to great  
 “ excess of it, such a person is to be treated  
 “ in this manner: Give him the juice of  
 “ the herb cneorum, or hippophaes, or the  
 “ granum cnidium. But these medicines  
 “ should be exhibited in the following man-  
 “ ner, the cneorum on the sixth day; the  
 “ juice of the hippophaes on the eighth,  
 “ and the granum cnidium on the tenth;  
 “ and these are to be continued ’till the pa-  
 “ tient be thoroughly purged, and his belly  
 “ become soft. On the intermediate days  
 “ let him take the same things for food as  
 “ the former; but above all let him drink  
 “ as much as possible of that water from  
 “ which the disease first arose, in order to  
 “ excite commotions in the bowels, and to  
 “ purge him a good deal, for by this mea-  
 “ sure he will get well; but if glysters  
 “ should appear to be often necessary, take  
 “ of the cneorum bruised, to the quantity  
 “ of half an hemina, mixed with a third  
 “ part of an hemina of honey, and a fourth  
 “ part of an hemina of the juice of the  
 “ beet root, and then prepare the glysters.  
 “ The day after give eight heminæ of asses  
 “ milk, with honey or salt in it, after the  
 “ purge



“ purge, let the patient use the same things  
 “ as the former, and exercise in the same  
 “ manner. If he be emaciated, he should  
 “ use the same means of cure, but let his  
 “ body be previously moistened with warm  
 “ fomentations, to render it more obedient  
 “ to the medicines.” This last chapter on  
 the universal Dropsy, may be considered as  
 a collection or compendium of the remedies  
 which he has at different times used for the  
 cure of this disease. He exhibits purges  
 and glysters with the granum cnidium, and  
 the juice of the beet root. He gives milk  
 with honey, or salt, in a quantity of eight  
 heminæ, and after the purges, advises the  
 same things as to the former, and exercise  
 in the same manner. He even endeavours  
 by a great volume of waters to open the ex-  
 cretories which had been contracted and  
 closed. Vanswieten in mentioning the his-  
 tories of dropfical persons, cured by medi-  
 cal waters, upon the authority of the cele-  
 brated Cocchi, quotes this last chapter of  
 Hippocrates upon the subject of giving wa-  
 ter, and ingenuously, but with some sur-  
 prize, confesses, “ That although there  
 “ is no mention made here of medicated  
 “ water

“ water, it nevertheless appears, that Hip-  
 “ pocrates attempted to expel waters, col-  
 “ lected within the body, out of it, by  
 “ water drank in very large quantities.”

An emaciated person Hippocrates even advises to use the same means of cure, but before he takes any medicine he orders his body to be fomented, for the express purpose of giving efficacy to it. Every one at all conversant in the treatment of this disease, knows, that in it's advanced stage, the inhalation by the pores of the skin is much increased; fomentations therefore, are likely to moisten the body effectually. These words afford us a useful lesson to avoid to throw acrid medicines into any dry and exhausted body without preparation, if we are prohibited from doing it in the case of a dropical person, without previously moistening his body.

There are hints respecting the different species of the Dropsy scattered in various parts of the works of Hippocrates. Thus, in his book on the diet proper for persons in acute diseases, we read, “ there are two  
 “ sorts

“ forts of Dropsy, one of which termed  
 “ the anasarca, when it attacks a man is  
 “ fatal. The other the tympanitis, requires  
 “ great good fortune to cure, and espe-  
 “ cially much labour, fomentation, and  
 “ temperance. Let him eat dry and acrid  
 “ things, for by these means, he will make  
 “ a great deal of water, and will improve  
 “ in strength ; but if he should have a dif-  
 “ ficulty of breathing, and it should be  
 “ summer, and he should be in the vigour  
 “ of life, and possess much strength, it  
 “ will be proper to draw blood from the  
 “ arm. Then let him eat bread of dry  
 “ qualities, steeped in dark wine and oil,  
 “ let him drink as little as possible, labour  
 “ much, and eat the flesh of young swine  
 “ boiled in vinegar, that he may be able to  
 “ support the severe exercise.”

In reading the works of Hippocrates, it  
 is of the greatest consequence to distinguish  
 such as are certainly genuine, or are with  
 great reason referred to him, from those  
 which are falsely ascribed to him. If you  
 neglect this caution, you will be very apt,  
 as Haller justly observes, to make Hippocra-

tes contradict himself. We must therefore remark of this book, that what is contained in it subsequent to that part of the text which speaks of the baths, most authors have suspected not to be the production of Hippocrates. Athenæus says, that half this book is spurious. Augustinus Gadal-dinus, who had seen three Greek manuscript copies of it, observes, that the text of it is confused and corrupted. Galen entertains suspicions of many parts of this book, and takes occasion from thence in his peculiar manner, to inveigh with acrimony against the errors and ignorance of other physicians, when he asserts, “ many things in this  
 “ book, as I have said, are well remark-  
 “ ed; wherefore many persons have given  
 “ credit to things in it which have not been  
 “ well founded, and those especially who  
 “ have been conscious to themselves, that  
 “ they have not possessed a critical know-  
 “ ledge of writers.” Galen produces the very passage we have quoted, as an instance of the absurdities and inconsistencies it contains. To me it appears, that there is a variety of matter relating to different diseases heaped together in this book, without ei-  
 ther



ther order or connexion. First, it is said that Dropsies are of two kinds, one of which, the anasarca, admitting perhaps of the most easy cure of any, is pronounced to be so fatal (if we were to give credit to this passage) as to be incapable of cure; and as if the case were really desperate, Hippocrates does not say a word of the method of treating it, but is very diffuse in mentioning the way of curing the other species of it, the tympanitis. If it be summer, and the patient be strong, venesection is recommended to remove the difficulty of breathing. But do dry and acrid things, does bread steeped in oil and wine, (which dry and heat) do strong exercise and little drink suit a person, who on account of a difficult respiration required bleeding? The acrid substances which Hippocrates usually gives to Dropsical persons, are garlick and other things of that nature. What are the properties of garlick, according to the opinion of Hippocrates? “Garlick breaks off wind, “and occasions a heat about the chest, it “begets a sense of weight in the head, and “anxiety, and if the patient be subject to “any other painful sensation, it exasper-



“ates it.” Although garlick is proper for dropfical people, as having a tendency to promote the excretions, is it credible that Hippocrates, when a difficulty of respiration was already present, would recommend a thing, which from its nature was likely to bring on or to increase those inconveniencies? When the pituite or phlegm had fallen upon the liver, and had excited a heat and a dropfical effusion, Hippocrates does not advise the dry and hot things, but moistening things—but milk with aqua mulsa and the sweet watery wine, and the ten first days he orders an abstinence from meat. An inflammation of the lungs, and a difficulty of breathing, are properly treated by venesection; under these circumstances too it may be proper to give liquids cautiously and sparingly, lest, their passage being somewhat straitened through the lungs they should be effused into the chest, which might be not unlikely to happen, if with this difficulty of respiration, the patient should use the exercise here advised with great quantities of drink. But it is no way proper to reason upon this text, as it is in all its parts confused and corrupted; what we read in another part of this book

lative to this subject, is more in the spirit of Hippocrates. “ Let the filings of brass as much as will lay upon three times the breadth of a probe, be mixed with a little ordinary meal, and after they have been rubbed, let them be made into pills and given. They carry off water downwards, &c.” and a little afterwards “ rub the meconium peplum, after “ water has been poured upon it, strain it. “ After it has been mixed with meal boil it “ into a cake, pouring boiled honey upon “ it, give it to be eat by dropfical people, “ and let them drink afterwards the sweet ‘ watery wine, or the aqua mulsa.” But unless what is here said had been consonant to that which is delivered in the book on the internal affections, (the authority of which no one has ever questioned) I should have paid no regard to it. Why Hippocrates recommended the mulsa in this disease, appears from that passage, where he says, “ ciet autem urinas abunde mulsa nisi ex visceribus aliquod prohibuerit. But the “ mulsa, the wine, honey, and water, ex- “ cites a copious discharge of urine, unless “ some obstacle in the bowels prevents it.”

It is evident therefore, from what has been premised, that Hippocrates gave broths and ptisans with medicines in the Dropsy, and that he exhibited the aqua mulsa with the intention of “ preparing the body for taking “ the medicines,”\* that he gave milk in a quantity of four and of eight heminæ (three quarters of a pint) and that he exhibited even water itself very copiously ; and moreover, when circumstances required it, that he moistened with fomentations the bodies of people extenuated by an universal Dropsy, with the view of facilitating the operations of the medicines. † When therefore Dr. Collin, at Vienna, gave diluting drinks to dropical people with their medicines : When Bacher moistened the bodies of those who took the pills of hellebore, with broths and drinks of various kinds, they do not seem to have deviated in any way from the rules prescribed to us by Hippocrates. They wander very widely from his methods, who, as has been usual of late, give drinks in a very sparing quantity ; and without any precautions, without any previous humectation of the body, irritate the bowels with acrid

\* ἵνα γούν ωργισμένον το σωμα ἢ πρὸς τὴν φαρμαχοπείην.

† Οὕτως ἂν μάλλον τῶν φαρμακῶν υπακούη.

acrid purgatives—who to provoke urine give salts both alkaline and neutral, (which increase thirst, and heighten fever) without any diluting drinks to promote their operation. This abstinence from drink has the authority indeed of many authors. It is a practice which has prevailed, and does still prevail but too much. Hence have arisen those frequent complaints of the weakness and fruitless use of medicines. When physicians have wished to procure a copious discharge of urine, by refusing to give drinks they have failed in their attempts. The foreign physicians, by restoring the practice of Hippocrates, and by giving drinks whenever they have desired to promote evacuations by the bowels, or the kidneys, have added extraordinary powers to very common medicines, and have thereby relieved their patients, and at the same time exalted their own reputation.

Hippocrates sometimes endeavours to cure the Dropsy by the assistance of diet only. It is therefore, necessary in this place, that I should say somewhat upon the subject of food. In chusing fit aliment for



a weak constitution, great care should be taken that what is received as food may be of easy solution in the stomach, and that when dissolved it may be easily converted into nourishment ; such things are to be solicitously avoided as are of slow or difficult solution in the stomach, or when dissolved, yield viscid and tenacious juices, incapable without great labour of digestion, of being properly concocted for the necessary purposes of the system. Therefore in general, when Hippocrates wished to recruit the strength of a convalescent, instead of the meat of young animals, he recommends those of a more advanced age, birds and game ; and both flesh and fish were to be roasted and well dressed. The opinion which more recent experiments seem more satisfactorily to have proved, does not appear to have been unknown to that sagacious physician, namely, that the meat of grown animals is more easily dissolved in the stomach than that of young animals ; and that the former when dissolved, are not like the latter, endowed with pituitous, viscid, tenacious qualities, but repair the waste of the machine with the most wholesome juices.

But



But besides the general circumstances to be attended to in all weak constitutions, there are other considerations which should influence us in prescribing a proper diet for dropfical people. For not only those things are to be recommended which are easy of digestion, but such things are particularly to be preferred, which are calculated at the same time to recruit the strength, and to promote and support all the watery and ferous excretions. The greater discharges of the body are made by perspiration and urine; there is as much humidity dissipated by the pores of the skin, as by all the other evacuations of the body. In this country, according to Dr. Keil, the mean proportion between the greatest and the least perspiration is three and thirty ounces. This excretion, indeed, sometimes suffers a check without any great inconvenience; for in an healthy constitution, the kidneys in some measure are vicarious, and the matter repelled from the surface of the body is expelled by them; but in the Dropsy a check of perspiration has more serious consequences; for in this case the urine flowing very sparingly, if the humid perspirable matter do not

escape by the pores of the skin, it will flow back into the cavities of the body. Hence a check of perspiration has always been enumerated by authors, among the pre-disponent causes of the Dropsy. Great care therefore should be taken to avoid eating such things as may be apt to obstruct the discharge of perspiration, or of the urine, which last in an healthy person amounts commonly in 24 hours, to two pounds and six ounces. The greater the quantity of fluid is which is discharged by these natural out-lets, the more will this disease be diminished. The disease always increases whenever these excretions are diminished or suppressed; but in selecting matters of easy digestion, you promote these evacuations. For that which is of easy digestion, according to Sanctorius, passes off readily by perspiration, and whatever in general oppresses the stomach, diminishes the perspiration. Let us now consider what is the food which Hippocrates recommends in these cases: In the chapter concerning the Dropsy arising from a thin pituite or phlegm, he says, “ This person should be cured by a dry  
 “ diet, and for this purpose he should eat  
 “ bread

“ bread that is old and dry ; and for meat  
 “ the flesh of hares, of dogs that have at-  
 “ tained maturity, of sheep, and of swine,  
 “ and of fowls ; and all these should be  
 “ well roasted. He should eat polypi boiled  
 “ in dark austere wine ; let him drink the  
 “ wine as thick and as acerb as possible ;  
 “ let him have the gudgeon, the sea fishes  
 “ called the draco, the scorio, &c. &c.  
 “ Let them be boiled, but not whilst they  
 “ are fresh, and let them be eat cold, for  
 “ then they are driest, and let them not  
 “ be dipped in broths, nor let them be  
 “ prepared or preserved by salt. For herbs  
 “ let him use the horse-radish and parsley ;  
 “ let him bake the lentils, and eat them  
 “ dressed with vinegar. In the day-time,  
 “ and after supper, let him walk, sleep at  
 “ night, and rise early in the morning.  
 “ If he be restored by these means, it is  
 “ well ; but if not, give him the herb  
 “ cneorum, or the juice of the hippophaes,  
 “ or the granum cnidium : and after the  
 “ purgative, let him take two heminae of  
 “ the decoction of lentils, and let him  
 “ eat but little bread ; let him drink dark  
 “ austere wine, but in small quantity ; let  
 “ him

“ him take the purging medicines [twice  
 “ a day ’till he be empty.” Vanfwieten  
 has presented this chapter in such a shape to  
 the reader, as to excite a well grounded  
 suspicion that the learned physician neither  
 understood the doctrine of Hippocrates, nor  
 the Greek text of this passage, for he states  
 it in the following manner: “ This person  
 “ it is proper to cure by a dry diet. Hip-  
 “ pocrates commends a dry diet of meats  
 “ chiefly roasted; he gives fish sodden, but  
 “ boiled the day before and cold, that it may  
 “ be as dry as possible, and he for this reason  
 “ advises, that they should not be dipped  
 “ in their broths, and that they should be  
 “ tasteless and insipid to prevent their in-  
 “ creasing the thirst; he gave the dark  
 “ wine as thick as possible, but small in  
 “ quantity.” Here this illustrious physi-  
 cian has joined the beginning with the end  
 of this chapter, and has entirely omitted  
 the middle part of it. He drops entirely,  
 “ let him drink the dark austere wine in  
 “ a quantity not limited.” But the last  
 words “ *vinum paucum*,” he brings for-  
 ward as being suitable to his own opinion,  
 though by no means used by Hippocrates  
 to



to express the quantity of wine which it is in general right to give to dropical people, but spoken of the wine which it is proper to give to persons who take purgatives twice a day. But he has not only by transposing words, and combining them again in a different order, mutilated and even changed the sense of Hippocrates; he has likewise been deficient in not giving a right explanation of the Greek text: For he has translated the word *εωλοισι* after the example of Charterius, (*pridie coctos*) boiled the day before. There is no ground for saying that *εωλος* signifies “coctus” boiled. Meats which had been killed some time would properly be termed *εωλα* such as have been kept some time, not such as are fresh. Fœsius seems therefore to have judged rightly in translating the word *εωλοισι* in this place “*minime recentibus*, by no “means fresh.” For *εωλον* is generally opposed *τω προσφατω και νεαρω*, *recenti*, fresh. Galen himself uses the word *εωλον* in this sense, where he observes “*εωλον γαρ ευπεπτοτερον τε προσφατε quod minime recens est, facilius coquitur, quam quod recens est.*” What is by no means fresh is more easily dissolved in the stomach, and digested than that  
which



which is fresh. *Αναλτα* are things not prepared with salt. *Αναλτον αλφιτον*, Galen explains to be food without salt, and not of a saline nature. The translation, therefore, which I have given of the word *ανάλτοι*, namely, “ that the fishes should not be prepared or “ dressed with salt,” seems to coincide more with the sense of the author than any other. But nothing can be more suitable to the circumstances of dropical people than this diet. For such are the properties of the articles recommended by Hippocrates, namely, of the flesh of hares, and of other adult animals, that being of an alkaline nature, they will be very easily dissolved in the stomach, and tend to promote perspiration, and with respect to the fishes, lest they should oppress the stomach, and not dissolve with sufficient readiness, he would not have them eaten too fresh: And further, lest the thirst should be increased, or perhaps lest the flesh being hardened by salt, should wear and injure the stomach, he advises that they should not be preserved or dressed with salt. The swines flesh here recommended among others, according to Sanctorius, is apt to offend the stomach, and is not of a very perspi-

spirable nature. Some have thought that it was forbid by the Mosaical law, because it was supposed by stopping the pores of the skin, to occasion the leprosy. It is most certain, that the fat not only of swine, but of all animals is apt to hurt the stomach, and is not inclined to favour perspiration. It should therefore be very likely to do harm in diseases of the skin; and as swine's flesh is more frequently eat too fat than that of any other animal, it does not seem improbable that it was on that account forbid by our sacred law-giver. At the same time it must be allowed, that the Grecians did not decline the use of it; on the contrary, it is praised by the writers of that nation, as a most wholesome food. Sanctorius's Commentator Dr. Quincy mentions the aphorism relating to this subject, among the errors of the Italian, and would have us understand it to have been spoken of swine's flesh which is eaten too fat. Nor is it without foundation, that he asserts it to be agreeable to daily experience, that swines flesh not too fat, but properly fed, is both easily dissolved in the stomach, and is disposed to pass off readily by perspiration. The various

ous properties of the different sorts of this meat were not unknown to Hippocrates. He says, “ the meats of swine are bad when  
 “ they are more crude than ordinary; or  
 “ when they have been dried; for then they  
 “ produce cholera and great commotions  
 “ in the body. But their meat is excellent,  
 “ especially so when they are neither too  
 “ fat, nor extremely lean, and before they  
 “ have attained the age of an old victim,  
 “ they are to be eat without their skin and  
 “ cold.” Under these circumstances the nature of this meat is not such as either to hurt the stomach, or to stick in the pores of the skin. In order that all these different kinds of food may be properly concocted, and that the excretions may go on rightly, exercise is enjoined. With the same view to promote perspiration and urine, horseradish and parsley are recommended, and the dark austere wine, which fortifies the stomach and strengthens the body. But the quantity of wine allowed by Hippocrates is not defined. “ Let him drink says he, “ the dark austere wine.” It should be remarked however, that where he would have the austere wine to be taken only in small

small quantities, he particularly specifies it. So at the end of the chapter when he orders purgatives twice a day, he says the wine is to be given, but in a small quantity. If he had never given it but in small quantity in Dropsies, his admonition to give only small quantities when purges are exhibited twice a day, would by no means have been necessary. The exception proves, that the patient when he does not take purges in that way, is not to be so confined; nor is it probable (if there was any room for conjecture in this place) he would have given that wine sparingly which he thought calculated to promote strength and dryness. But if we look into his book of Prognostics, there can remain no doubt but that Hippocrates gave wine freely to dropfical people, for he deduced his prognostic of the event of the disease, from the change which the wines underwent in passing through the kidneys. Το δὲ οὐρὸν φαίνεται πειραζομένον πρὸς τὰ ἐπιτηδεύματα, καὶ τῶν οἴνων τὰς μεταβολὰς. It is proper that the urine when it passes should appear suitably to the means used, and the change of the wines. Ἐπιτηδεύματα seems to signify, as Fœsius observes, the method of cure suited to dropfical people, and calculated



culated to promote urine and to draw off the waters or any thing else adapted to forward their recovery. That the wines were reckoned in the number of things used to provoke the urine is evident from the terms of the prognostic itself. If they had been drank in small quantities, they would have been blended with and disappeared in the other humours, and the prognostic would have been deduced from the urines themselves, and not from the change of the wines.

These premises being weighed and considered, it will be sufficiently evident how different the methods of Hippocrates were, when he endeavoured to cure the Dropsy by medicines, and a dry diet. The force and efficacy of medicines he endeavoured to increase by giving broths and ptisans, and aqua mulsa with them. But when no medicines were exhibited, he did not indulge his patients in diluting drinks, he did not even allow them the sweet watery wine, nor the aqua mulsa: he only gave with food of easy digestion, the dark austere wine, which though endowed with the faculty of provoking urine, is more useful in strengthening the



the excretions by strengthening the body in general. Moreover of this wine he does not allow an excessive nor a sparing quantity ; but just as much as may be sufficient to dissolve the food, to recruit the strength, and to provoke urine. By these means the passage of the thick and viscid juices will be facilitated, obstructions which of themselves often excite the disease will be prevented, and the more acrid humours which frequently occasion and support a fever will be washed off. Thirst therefore is not to be accounted, as some would have it, so perfidious and so deceitful a symptom in this case, which according to Gaubius, is particularly urgent and distressing, when the upper part of the *primæ viæ* the seat of it, or the other parts of the body require humectation. For I am persuaded, that more mischief arises from the endeavour to bear it, than from obeying, after the example of Hippocrates, the call of nature by an indulgence of a moderate quantity of wine.

The error therefore, which has crept into the practice of physicians, seems to consist principally in their having confounded the

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precept

precept respecting these two methods of cure; which Hippocrates delivered with distinctness and perspicuity, together, and in their endeavouring to put them both into practice at the same time. Thus: because Hippocrates taught that but little bread and only a small quantity of wine, were to be given when purgatives were exhibited twice a day; therefore Vanswieten has contended, that wine was to be allowed only in small quantities when no medicines were given. Because no aqueous fluids were given by Hippocrates without medicines at the same time, physicians have been inclined to think that none were to be used when medicines were taken. Therefore when they are called to dropical people, they are in the daily habit of prescribing medicines, and of recommending at the same time a dry diet, and as sparing a quantity of drink as possible.

Let us now compare the diet recommended by Hippocrates, with that which is advised by other Physicians. The greater part of the profession have followed the authority of Celsus, and not of Hippocrates in  
this

this matter. Celsus would have their food be of a mixed nature, but of an hard kind. Many people approve of a dry and hard diet; others recommend the flesh of young animals, and bread twice baked, even cheese and butter. No more drink is to be given according to Celsus than is just sufficient to support life, and that is said to be preferable which provokes urine. Will any drink given only in such quantities as to support life, be likely to provoke urine? Will not food of a hard nature (even if drink be allowed) oppress the stomach of a strong and healthy man? Has not hard meat, a tenacious and unwholesome food, a viscid kind of bread, been reckoned by authors among the causes why poor people and their children are so very subject to the Dropsy? But if these things are apt to oppress the strength of a stout man, how pernicious must they prove to one already a valetudinarian, to one labouring under a Dropsy! The blood of dropical people is generally said to be faulty in having a lentor or viscosity in it; and yet cheese and butter, both of them of a viscid nature, and possessing the worse qualities for offending the stomach, are the principal

ingredients recommended by modern physicians to dropfical people, and they likewise allow the flesh of young animals, much as this is disposed to visciduity and to generate phlegm. By what means are those hard and viscid substances to be dissolved in the stomach, if the smallest quantity of drink possible be, as is usual, given to dropfical persons? The saliva is small in quantity and viscid. May we not hence infer, that the gastric juices are also small in quantity, viscid in their natures, and depraved in their qualities. To supply the deficiency in their quantity, a greater portion of liquids would seem to be required, and yet drink according to Celsus and others, is not to be given but in a quantity to support life. These kinds of food will consequently remain long in the stomach: If no obstructions existed before, some will probably soon rise: The strength of the body will be depressed, perspiration, and the other excretions will be impeded. The viscid humours and phlegm arising from this food, will float about the centre of the body, and will feed the disease whilst the surface of it will be dry and parched. This diet therefore must have



have concurred with the disease in adding to the ordinary inhalation of moisture by the pores of the skin so immensely, as to occasion dropfical people in the space of a few days, without taking any drink during the time, to absorb by the pores of the skin more than an hundred pounds weight of fluids. ‡ For when no disease exists, if the body by any cause be rendered dry and parched, so far will it be from expelling the weight of three and thirty ounces by the pores of the skin, that on the contrary, a great quantity of moisture will be inhaled by them. Thus Keil observed, that a young man in health, but exhausted by fasting and walking six miles, inhaled by the pores of the skin in one night eighteen ounces ; a body therefore, in health, deprived by fasting of its usual supply of juices, attracts humidity

‡ *Hydropicorum utique exempla nos docuere paucos intra dies ultra 100 Libras cutis imbibi poris. V. d. Haen Tractat. de Febrium divisionibus, p. 49, docet etiam Swietenius corpora Hydropicorum ex ipso aere in se aquam trahere imprimis cum nulla alia causa assignari possit, cur ascitici per Paracentese ab omni colluvie, aquosa liberari, tam cito denuo impleantur, licet parcissimo potu et cibis siccioribus utantur, excretæque urinæ copia potus ingesti quantitatem superet. Vanswieten Comment. vol. iv. p. 249.*

from



from the atmosphere. Is therefore all the inhalation which takes place in the Dropsy to be set down to the account of the disease? Is it not in part to be ascribed to the hard food and to the abstinence from drink? But by these means Physicians have so tortured their patients, as to render it uncertain what part of their misfortune is derived from their disease, or what part this ill-judged diet may have brought upon them. All this advice is totally repugnant to the doctrine of Hippocrates; he does not require as little drink to be used as possible, but he praises the dark austere wine; he does not recommend the flesh of young animals, but of grown ones; he does not advise hard and viscid substances, but things of easy solution in the stomach, and such as have been kept some time; he does not recommend things of a phlegmy nature which stick about the heart and centre of the body, and increase the disease, but such as promote perspiration, and are suited to increase all the excretions.

From what source have these absurd methods of cure crept into physic? How has it

it happened that this abstinence from drink has so generally prevailed? I have observed that it is written in Celsus, and after him repeated by all his followers and imitators, that drink is not to be given but just in a sufficient quantity to support life. This doctrine spread by that elegant scholar, has perverted the judgment of physicians in all the subsequent ages, and almost extinguished the ancient and more sound principles of Hippocrates. But truly, these opinions either convict Hippocrates (who in all ages has been esteemed the best and wisest physician) of error, or are themselves unworthy of credit or attention. Therefore it is proper to enquire whether they rest on the authority of Celsus only, or on the experience of others. There are persons who think that Celsus was a Rhetorician, and that he was a greater master of eloquence than of the art of healing; but I shall pass over whether he was a physician or not, in silence. For it is not likely that he would have digested the precepts of the art in so clear and perspicuous a manner, or have explained them so well, if he had not himself been conversant in the practice of it. However  
that

that matter may be, it is certain that those things which are contained in the works of Celsus, were borrowed from the Greeks chiefly; namely from Hippocrates, and from Asclepiades. But those rules which Celsus delivers respecting the administration of drink in diseases, are repugnant to those of Hippocrates, and are very agreeable to the old prejudices of Asclepiades and the mechanical sect of physicians. In acute diseases Hippocrates had great reliance on drinks, or an easily digested farinaceous food. In the Dropsy, when he gave medicines, he advises moistening things at the same time: He allowed dropfical people with their food the dry austere wine; but in the doctrine which teaches that nourishment and drink are to be given every third day in acute diseases, Asclepiades particularly enjoins abstinence on the first days: he tortured his patients with thirst and with watching: In the Dropsy he recommends an abstinence from meat and from drink. In like manner Celsus says, “ on  
 “ the first day of a fever no liquid should  
 “ be given unless the vessels should have so  
 “ collapsed suddenly, as to require food  
 “ likewise: Nevertheless if the thirst be  
 extremely

“ extremely urgent, drink may be given.  
 “ In the Dropsy no more drink is to be  
 “ given than just enough to support life.”  
 Celsus evidently inclines to the side of the mechanical sect of physicians, and he allows drinks with so much reluctance in fevers, that he has with great reason been said by Haller to have been fearful of giving drink ever in an ardent fever. Nor can it be thought strange, that a physician who thought drink prejudicial in a fever, should discourage the use of it in a Dropsy. These opinions however, are entirely contrary to those of Hippocrates. This sagacious physician did not think us so formed as to be deprived of drink at any time without injury. He was only solicitous to discover the properties of every fluid, and to select for each patient such an one as might be suited, from its virtues, to the particular exigencies of his case.

Relying therefore on the precepts of Hippocrates, and taught by the example of foreign physicians, I put this ancient and good method of cure into practice in the Middlesex Hospital, and I have there in-

con-

sequence of it been very fortunate in the cure of Dropsies. It may not perhaps be void of use to relate briefly a method which has in that place succeeded so well to my wishes.

If the patient was not very weak, I sometimes endeavoured to dispel the waters in some degree by purges, and for that purpose every other day or twice in a week, according to the strength of the patient, I gave a powder composed of half a drachm of jalap, and seven grains of calomel; on the intermediate days between the purges, the patient took the saline draught † with two scruples or a drachm of the acetum scilliticum, with the purgatives, water gruel, broths and other moistening things were given. That I might be the more certain how much liquids with medicines were necessary to provoke the urine, and to dispel the tumours, at first with the diuretick medicines

† R. Aquæ Menthæ vulgaris simplicis unciam unam. Aquæ puræ unciam dimidiam. Salis Tartari Grana quindecim aceti destillati drachmas sex vel q. s. donec cessaverit effervescentia, aq. piper. Jamaïcen. drachmam unam. Syr. Balf. drachmam unam. 31 p.

diluting



diluting drinks were not allowed. Trial was made with the medicines only. Although the swellings were often diminished by the purges, the urine almost always continued small in quantity, and the strength was much diminished; omitting therefore, the hydragogue purge, lest the strength should be too much broken and giving occasionally, as costiveness might require, the bitter purging salt or any laxative of that kind, I ordered the saline draught with the acetum scilliticum, to be continued, and I gave at the same time a large quantity of barley water with a little of the diuretick salt in it, from which it happened that the kidneys which had been in vain solicited before, began now to do their duty, and frequently within the space of eight and forty hours very copious quantities of urine would be produced. But because drinks with any saline matter dissolved in them, are neither agreeable to the taste nor quench the thirst, I contrived a drink well suited to dropical people, made of half an ounce of cream of tartar dissolved in two pints of barley water, to which syrup enough to make it agreeable, and two ounces of French brandy

brandy were added. The praises which Vincentius Menghini has bestowed on the cream of tartar for the cure of Dropsies, and the extraordinary effects I have myself seen it produce, inclined me to recommend the above-mentioned drink in this disease. In the acts of the society of Bologna, the histories of fifteen dropical persons are related who were entirely cured by half an ounce of cream of tartar alone taken daily. But in these histories there is this extraordinary circumstance, that the cream of tartar taken for twenty, thirty, or even forty days, had no effect at all, but dissolved in a large quantity of water; in the way I have mentioned it generally had the effect in as many hours of bringing water away copiously. This drink is now the common drink in our hospital, which dropical people use ad libitum with a variety of medicines, some of which I have already mentioned. And here I cannot pass over in silence the decoction of the seneka root, of which prepared according to Edingburg Pharmacopœa, I have given three ounces twice a day; but in this form \* it has generally excited

\* R. Radicis Senekæ i. unc. aquæ puræ sesquilibram decoque ad libram unam et cola.

vomiting and discomposed the body very much: But when I have made use of only half an ounce of the root in the same quantity of water, the medicine has proved a very good one; and though it *sometimes* produced vomiting and often occasioned nausea, yet it generally purged nine or ten times in the day and sometimes proved extremely diuretick: But in the use of the decoction of the seneka root, and other purgatives, (if the patient should be very weak) we should be very cautious not to persevere too long. That elegant scholar and skillful physician Dr. Mead, observed, “ that  
 “ where the strength is much reduced,  
 “ strong purges are pernicious; and that  
 “ the more fluid we discharge by the bow-  
 “ els, the more will flow into them,” and therefore left the patients should be too much weakened by a long perseverance in the use of purgatives, after having exhibited them for some days, I have always endeavoured to accomplish the remaining part of the cure by diuretick medicines, assisted by diluting drinks. Some purges however, at the beginning are almost always necessary; for the diuretick medicines have  
 seldom

feldom availed much 'till the dropfical tumours have been fomewhat diminifhed previously by purgatives ; and if by the affiftance of thefe I have not been able to fucceed in leffening the tumour of the abdomen, (which now and then has happened) I have generally found all diureticks fruitless. Does the compreffion of the kidnies from the too great weight of the water form the obftacle to their operation ? The waters being diminifhed by purgatives, is not the entrance of the drinks impregnated with diureticks into the kidnies facilitated, and the effects of the medicines thereby rendered more certain ? The ancients always confidered a difficulty to be purged as a very bad omen in a Dropfy.

From the time of my return to England, twelve men and one boy of about ten years of age, all of them afflicted with the fevereft degree of afcites and anafarca, have fallen under my care ; of thefe fix were perfectly cured, one was difcharged before his cure was finifhed, fix died ; but on opening the bodies of thefe laft, fome defect in the vifcera was always difcovered, which



rendered it impossible for them to be restored by medicine. To give a clearer idea of my method of cure, I shall relate the histories of a few cases. I will begin with that of Edward Jenkins, a man of 49 years of age, who on the 5th of May was received into the hospital. His belly was much distended with water, and on being gently struck with the hand, impressed it with the sense of water agitated within it. A considerable degree of anasarca occupied his feet and legs; his urine was small in quantity, and of an high colour; the thirst was great. To this man I gave the powder before mentioned, of jalap and calomel, but only twice in the week; on the intermediate days he took the saline draught with a drachm of the acetum scilliticum every six hours; he was not allowed any drink. The day on which the purge was given, he had ten stools, and on the following day the effect of the medicine continued, and moved the patient four or five times. He persevered in the use of these medicines to the sixteenth of May, with this effect, that the swelling of the abdomen was somewhat lessened; but scarcely any urine was made with the saline draught



draught and acetum scilliticum, therefore I gave a copious quantity of drink, and the effect was such, that on the day following the urine began to flow much more freely, and it increased daily so much, that in this space the swelling of the body had almost entirely disappeared; on the second of June the patient was so perfectly cured as to be discharged from the hospital.

Matthew Saunders of twenty three years of age, having laboured for some months under an intermittent fever, fell at last into a Dropsy. On the 18th of November, having both an ascites and anasarca, he was received into the hospital; on the day following he took the purge before mentioned, but prepared with five grains of calomel only. This medicine was repeated on the 23d; the first time it purged him eleven times, and the second time eight. On the intermediate days he took the saline draughts with the acetum scilliticum, every six hours, which were continued to the 7th of December, without any other medicine, and as he drank the barley water with the cream of tartar ad libitum, his urine came  
away

away plentifully. Having been coſtive for ſome days, he took the purging powder with the calomel increaſed to ſeven grains, which brought off a large quantity of water by ſtool; on the 8th the acetum ſcilliticum in the draught was increaſed to a drachm and a half. Theſe medicines were continued to the 15th of December, on which the acetum ſcilliticum in the draught was increaſed to two drachms. Although the acetum ſcilliticum in a quantity of forty drops will ſometimes excite nauſea and even vomiting, by increaſing it gradually this patient felt no other inconvenience from this large doſe, than a ſlight nauſea; by the aſſiſtance of theſe medicines, interpoſing now and then a purgative, the patient got quite well: and after he had taken the chalybeate wine for ſome time, to prevent a return of the complaint, at the end of January he was diſmiſſed cured from the Hoſpital.

In the month of December laſt, John Lucas, a young man of twenty years of age, having a ſevere degree of aſcites and anasarca, was ſent to the hoſpital by Dr.

G

Denman,

Denman. He had had his complaint six weeks, and it had increased gradually : the belly, the thighs, and the legs were greatly distended with water ; the cuticle of the penis and testicles were so full of it as to appear pellucid ; his eyes were red and much inflamed ; his pulse was hard and quick ; he complained of pain in his abdomen. Therefore, lest the viscera should be affected with inflammation, not fearful of bleeding, I ordered eight ounces of blood to be taken away. The blood when coagulated discovered a white buff on its surface, and concreted as firmly as if it had been drawn from a stout man. On the day following the bleeding, viz. the 12th of December, the patient took the purging powder, which gave him only four stools ; but exciting a slight salivation, it was not repeated. He continued the use of drink with cream of tartar to the 16th of December, but as the urine did not flow freely, I ordered him to take two spoonfuls of the hydragogue julep \* of the Edinburgh Pharmacopœa

\* *R. Aq. Menth. Sativ. ℥ vi.*

*Tart. Emet. gr. x.*

*Syr. de Rhamno ℥ ii. m.*

every morning, every two hours 'till the body was opened. But this medicine generally exciting a vomiting, did not purge more than three or four times: therefore on the 21<sup>st</sup> of December I gave him four ounces of a decoction of the feneka root made with six drachms of the root. Although this medicine at first excited vomiting, a great deal of water was brought off by stool: for the patient was purged ten or twelve times in the day by it; and I believe the medicine succeeded the better with him because he took it every day from the 21<sup>st</sup>. to the 26<sup>th</sup>; during this time I gave him the drink composed for dropical people, nor did the purging prevent the urine from flowing freely. By this method on the 26<sup>th</sup> day the swelling of the body had disappeared; nor did any part of the disease remain but in the feet and legs: The urine which was at first very red, and then appeared turbid, now put on its natural and good colour. The purgative therefore being discontinued, he took 'till the 30<sup>th</sup> two pills of five grains each, made of equal parts of the extract of the bark and salt of steel, mornings and evenings; and in the day-time,

I gave him twice the saline draught, with a scruple of the diuretick salt. By these means, the urine flowed more plentifully, and the swelling of the legs and feet continued to diminish : but the body being bound from the 26th, I gave him on the 30th an ounce of the bitter purging salt, which moved him twice, and the day following he returned to the use of the bracing and diuretick medicines, which with the occasional use of a laxative, he continued 'till the 5th of January, when being entirely cured, he left the hospital. By similar means David Gilbert, John Clay, and Daniel Harvey were cured, excepting that the last mentioned being of a lax fibre, and a leucophlegmatic habit, took no other diuretick medicine than the chalybeate wine increased to an half an ounce, with barley water and the diuretick salt for drink. By these medicines I have more than once seen, in a Dropsy which had resisted every method, the waters expelled, though they have by degrees sometimes accumulated again.

Among the patients who died, there were some whose cases afford some useful lessons respecting



respecting these methods of cure. The case of William Fox is a strong instance of it: he was forty-eight years of age, and was sent to the hospital in the month of April, with an ascites and anasarca. That very skillful surgeon Mr. Samuel Howard, being called into consultation, he perceived a hard tumour in the right hypochondrium. As the liver was so seriously affected, and the complaint was of long standing, omitting the paracentesis, I wished to try whether he could not be relieved by medicines; therefore I gave the decoction of seneka first, three times a day, afterwards twice only; he took the drink prepared for dropical people: he then had the squill pills and the chalybeate wine. By these medicines on the first of June, the swelling of the abdomen was so much diminished, that he imagined if he was recruited by sleep, which the noise prevented him from getting in the hospital, he should perfectly recover. On the day following, leave being given, he went home, and took whilst there the saline draught, with the acetum scilliticum; but not having the drink prepared in the hospital for dropical people, and fearing that any  
other

other might increase the disease, he abstained totally from liquids; the urine which had flowed freely, began immediately to diminish. On the 6th day of June he returned to the hospital, and made but a very sparing quantity of water, and the swelling of his belly increasing, I gave him the drink again, with the same medicine; his urine began to flow so plentifully, that on the 15th of June, his belly being very much diminished, he returned home a second time, where continuing the same drink with his medicine, the tumour of the abdomen continued to lessen 'till the 11th day of July. However, on the 29th of the same month, though his belly was not swelled, but freed from the waters, as his wife informed us, he died. That skillful physician Donald Munro, has given many instances of dropical persons, who after their waters had been expelled, died without any evident cause. The body of this man, as I was at some distance from London, was not opened; but it is likely that his liver and some other of the viscera were greatly diseased. It cannot but appear somewhat extraordinary, how easy a thing it was to provoke  
the

the urine of this patient: the same thing was remarkable in the case of John Baker, who had a Dropsy joined with a degree of the jaundice, and other symptoms of a diseased liver. By the assistance of diureticks with drink, the urine was easily provoked, and the swelling of the abdomen and legs often dispersed; but the disease returned although the patient took the chalybeate wine, and the drink (composed of barley water and the diuretick salt) but so far diminished as the proper secretion of the urine would admit; deceived by the pleasing hopes of a recovery, with which he had been flattered, he left the hospital, relieved but not cured. The same observations was made by Bacher, in the patients whom he cured, viz. that the urines of those persons who had the jaundice, or symptoms of a diseased liver, flowed more quickly and more freely than those of patients whose liver were in a perfectly sound state. Boerhaave observed, that in that anxiety which arises from an obstructed passage of the blood, through the vena portarum, a great quantity of urine is always discharged. May not the same reason for an increased secretion in the pa-

tients of whom we are speaking, be assigned,  
 viz. “ that the passage of the blood  
 “ through the vena portarum being ob-  
 “ structed, the venous system of the Chylo-  
 “ poietic viscera will not be able to empty  
 “ themselves into it; but these veins re-  
 “ maining full and distended, the arterial  
 “ blood brought by the cœliac and mesen-  
 “ teric arteries, which should empty them-  
 “ selves into these veins, will stagnate, and  
 “ of consequence a greater resistance will  
 “ be made to the blood thrown by the aorta  
 “ into these arteries. Therefore the left  
 “ ventricle will with the greater difficulty  
 “ discharge its blood into the aorta, ’till  
 “ either these obstacles are removed; or  
 “ other branches arising from the aorta, are  
 “ so far dilated as to receive that blood  
 “ which usually passes through the cœliac  
 “ and mesenteric arteries. But a greater  
 “ quantity of blood being driven into the  
 “ neighbouring emulgent arteries, a large  
 “ quantity of urine will of course be se-  
 “ creted: for the quantity of any secreted  
 “ fluid will always be so much the more  
 “ in proportion as the quantity of fluid  
 “ applied

“ applied to the secretory organ in a given  
 “ time is greater.”

The body of James Fisher, was immensely swelled by a watery fluid. I ordered him to be tapped, but the fluid came away so slowly by the canula, that it seemed to flow as fast into the abdomen, as it was discharged by the orifice. Something from the beginning had obstructed the cavity of the canula, and at last entirely choaked it; purges were of no avail to disperse the tumours; diureticks brought away no urine; all medicines were fruitless; the man died. The body being opened, the glands of the mesentery appeared much obstructed, the liver was hard and schirrous in every part, and much exceeded its natural size, the lungs which adhered to the pleura were covered with ulcers; in like manner neither the hydragogue julep, nor the decoction of seneka, nor any other means were of use to purge Ralph Methuen, nor could urine be procured by diureticks. Some very skillful physicians had before attempted to relieve him in St. George's Hospital, nor was he received into the Middlesex but to oblige  
 Dr.



Dr. Knox ; the patient died. On dissection, a great polypus was found in the vena cava, and another somewhat smaller in the aorta: the glands of the omentum were hard and scirrhous. The body of Thomas Riley was not opened, but the case of Thomas Gaul of 48 years of age, presented something deserving notice: Having been a hard drinker for twenty years, he had long been afflicted with an asthma. He was received into the hospital with an ascites and anasarca, his respiration was difficult and laborious, his cough was frequent, he could not lay down in his bed, but passed his days and nights sitting in a chair before the fire ; his pulse was so hard, that I have scarcely found one more so in a fever, or in an acute rheumatism ; it was at the same time so slow as not to beat more than sixty-three strokes, and sometimes only fifty-four in a minute. I ordered a vein to be opened and eight ounces of blood to be taken away, by which the patient was much relieved ; he took the decoction of seneka, and drank the barley water with the cream of tartar, but in small quantities : after some days had elapsed; instead of the decoction of seneka,

I gave him the saline draught with a drachm of the acetum scilliticum. By these means in the space of ten days the patient was so far relieved as to be able to lay down in his bed, and to get very quiet sleep. But the pulse began to grow hard again, and the water accumulated in his abdomen, and thighs and legs. The respiration became difficult again and laborious, I ordered a vein to be opened, and the same benefit attended the bleeding as before. The medicines having occasioned evacuations by stools and by the urine, the swellings of the abdomen and the legs were much lessened, but the disease returning again soon afterwards, the man went to his home, where in three days he died. His urine flowed plentifully to the last, and the body being opened, very little water was found in the abdomen, but in each cavity of the chest, three pounds of a serous fluid somewhat tinged with blood was found. The lungs were not much inflamed, but adhered to the pleura, and were covered with ulcers: The heart greatly exceeded its natural size; but it being in a private house, the body could not be examined with all the attention that was proper

per, and it was not permitted to carry it away. The viscera of the abdomen were found, even the liver though preternaturally hard in some parts, was not so affected as to account for the dropfy or for the death which followed. It is extremely difficult to carry off a fluid accumulated in the chest : But what signs of water in the chest were present in this case ? a laborious respiration and a difficulty in laying in a reclined posture are common to the hydro-thorax and ascites ; but the very great difficulty of breathing, and the uneasiness in a reclined posture made me solicitous and fearful lest the water should have penetrated into the chest. I thought myself however mistaken, when the patient could lay down and sleep quietly on the waters being evacuated from the abdomen. He had never complained of waking suddenly out of his sleep with a palpitation of the heart. Were the waters therefore poured into the chest a little before the death of the patient ? or could the water exist in the chest without occasioning the symptom just now mentioned ?

The case of John Henry a lad of ten years of age, who became dropfical from  
a scro-

a scrophulous habit, is not rare in this country. Water was effused in every part of his body, there was a fluid in his abdomen, in his thighs and legs; the skin of the penis and testicles was so distended and full, as to appear pellucid. Those parts seemed to be hid in water, all the face was swelled, and the eyelids especially had a great deal of water in them, he was troubled with a dry cough, which teized him so continually, that scarce any one could sleep in the same room with him. Medicines were fruitless, the dissection of the body showed the reason of it, the lungs adhered so strongly to the sides, that it was not without considerable force they could be separated from them; trifling adhesions of the lungs are sometimes born without inconvenience: but in this case the adhesions were so general, that it is wonderful how respiration could be performed. The glands of the mesentery were hard and increased to a very large size, the difficult passage of the blood through the lungs, and the obstructed glands of the mesentery were the occasion of these dropical effusions.

Three

Three women with ascites and anasarca were likewise admitted into the hospital, one of them after being confined to her bed, was relieved, but having committed a theft in the hospital, was discharged; had she staid, it is not probable she would have been cured, for she had a cough from the beginning of her disease, and spit up a thick fetid matter. The second woman, a little time after she came into the hospital, I do not know for what reason, left it. The third, viz. Martha Marr, 59 years old, admitted the 15th of December, was cured in the usual way by purges, diureticks with drink, and tonic remedies, and discharged the 25th of January following.

Four men labouring under an anasarca were received into the hospital; a great quantity of fluid was collected in the thighs, the legs, and the feet of Thomas Baker, (a man of 29 years of age) which soon likewise insinuated itself into the abdomen. This disease was occasioned by a morbid affection of the lungs: For he daily spit up an immense quantity of purulent matter. Death soon relieved him from his suffering.

The



The anasarca of the legs and feet of William Beach of forty-four years of age, which was occasioned by a severe fever, was soon cured with pills made of equal quantities of extract of the bark, and salt of steel, of which pills, he took ten grains three times a day. William Russel was brought to the hospital with an anasarca of the feet and legs, the consequence of a fever. He had a bad cough, and great thirst, but the disease readily yielded to a saline draught with the diuretick salt, and the drink adapted to dropical people. The anasarca of Thomas Morgan was of a much more serious nature, his thighs and legs were much distended, his hands and face were much swelled, the eyelids were greatly enlarged, there was little or no water in the abdomen, the complaint had come on slowly and increased gradually; but he was cured by a decoction of the feneka root in such a dose as to procure four or five stools a day, and with the drink of cream of tartar, &c. Some of the poor people who come once a week to the hospital for advice, were cured of various species of the Dropsy by the same remedies and methods which have been enumerated.

I gave

I gave the most common diureticks, such as the diuretick salt, the acetum scilliticum, the cream of tartar, even the chalybeate wine, for the very purpose that I might be more certain respecting this *method* of cure. I did not prescribe the pills of hellebore, nor the excellent medicines of Dr. Collin, of Vienna, lest that effect should be ascribed to the power of the medicine, which ought properly to be attributed to the method of cure. I do not deny the great virtues of the medicines prescribed by the foreign physicians. The power of all diureticks are not equal, but one much excells another in provoking urine. \* All that I affirm is this, that the powers of the weakest diureticks are much increased by the method before mentioned, and that, without its assistance, the most powerful ones are inefficacious.

The waters being evacuated, the second indication to prevent a new accumulation of them

\* The Editor of this book cannot suffer the subject of Diureticks to be passed over without remarking, that he has often experienced the beneficial effects of the digitalis purpurea, given in the manner recommended by the ingenious Dr. Withering, and that he has in many instances seen it succeed after the diureticks commonly exhibited have failed.

them, is answered by tonic bracing medicines; the extract of the bark, the salt of steel, and the chalybeate wine, as has been said, have succeeded to our best wishes.

My very worthy colleague Dr. James Carmichael Smith, a man of extraordinary skill in healing diseases, has used the same method of cure with great success. He had added force to various and excellent medicines by the moistening diet, and by a drink prepared like that which I gave, and taken ad libitum. Hence it has happened, that of fifteen men whom within two years and half he has treated for an ascites and anasarca, four were cured, four were relieved, six died, and one was discharged for some fault. Of fifteen women under the same complaints ten got well, four died, one was dismissed. That ingenious gentleman confirmed the observation, that women ill of these complaints, are sooner and more easily restored than men, for this reason, he thinks because women are rarely precipitated into these diseases by a schirrus of the liver, or a disease of the lungs.

These

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These facts having been stated and established, it now remains to give a rational explanation of them. Our hope of curing the Dropsy has been founded on an increased secretion of urine, but the quantity of any secreted fluid, as has been already said, will always be in proportion to the liquids applied to the secretory organ in any given time. The secretion of urine in this disease seems to be lessened, because the blood returns from the extremities in a diminished stream, the thinner parts always running into the cavities or cellular texture: and if before it arrives at the kidneys, it should receive no increase from the primæ viæ, the diuretick medicines will have little effect in provoking the urine; for very little fluid penetrating into the kidneys for the causes mentioned, the medicines will not reach to the parts to which they are directed, but will be applied in very small quantities to the vessels of the kidneys. Vanswieten observed, “ that things of a saline nature, saline  
 “ matters increase the secretion of urine,  
 “ for this reason, that they increase the  
 “ thirst, and therefore more drink is taken  
 “ than usual. For unless persons drink at  
 “ the same time, the urine will thereby  
 “ be



“ be rendered more acrid, and the desire to  
 “ make water will be more frequent: but  
 “ there will not follow a more copious secre-  
 “ tion of urine, which is the circumstance  
 “ particularly wanted in the cure of the  
 “ Dropfy.” Though this illustrious phyfi-  
 cian made this observation, yet he was so  
 inconsistent as to prescribe both alkaline and  
 neutral salts in those cases, and to refuse his  
 patients drink but in the most sparing quan-  
 tity. With what reason could he expect  
 that salts would bring off urine in persons  
 whose vessels were robbed of the watery  
 parts of the blood by the Dropfy, which  
 those very same salts were incapable of do-  
 ing in an healthy and succulent body. It  
 must appear extraordinary that Vanfwieten  
 should have been so fearful of drinks with  
 medicines in Dropsies, not only because by  
 his own confession, it was not safe to admi-  
 nister saline remedies without them, for  
 fear of increasing thirst and exasperating the  
 fever: but because according to his own  
 remark, Hippocrates often “ endeavoured  
 “ to expel water collected in the body by  
 “ copious draughts of water.” If this may  
 be done with safety, how much more safe  
 would



would it be to exhibit water joined with saline matters, which by their volume as well as stimulus might mutually conspire to promote the secretion of urine.

But, say the adversaries of this method, there is a danger of adding to the Dropsy by the drink without increasing the urine: For not only a stimulus and a quantity of fluids are requisite to increase the secretion of it, but strength in the heart to propel these fluids with a certain degree of force into the secretory organ. Dropical people say, they are weak: the fluids therefore will not be propelled into the kidneys, they will not be pushed into the emulgent arteries, but they will be carried downwards by their weight, and will insinuate themselves into the different cavities of the body. The muscles likewise from the tumour of the distended abdomen, will contract the space occupied by the kidneys, and will compress their vessels so far as to prevent fluids from getting into them with facility. In answer to these objections it may be observed, the secretion of urine has the peculiarity of being excited by the least possible force in the heart.

heart. In the weakest persons, even when the kidneys are affected with a spasm as in the hysteria, we often see a great flow of urine, and if we consider attentively the structure of the kidneys, nature seems to have provided in some measure for this circumstance, and thereby to have guarded us against the Dropsy. For the vessels of the kidneys are so formed that there are no secreting arteries in the body which fluids enter with so much facility as into them. Boerhaave long ago observed that in no part of the body did the great arteries give off their small branches so suddenly as in the kidneys. Hence the venal blood will have a greater velocity in the smaller vessels, and a greater separation of its parts, as Borelli observed, by which means its water will be more plentifully carried off. This increase of velocity is clearly proved by the observations of the famous Le Dran, who shows that more blood is poured out by a small artery when it arises from a great arterial trunk. The ingenious Bordeu demonstrates that the kidneys are not subject to be compressed by the distention of the muscles of the abdomen, nor is the secretion of urine hindered

hindered by such a cause. The weakness therefore of dropfical persons is no obstacle to prevent liquids from penetrating into the kidneys, the structure of the venal arteries favours their entrance into them, the compression of the arteries situated in the lower parts of the abdomen from the weight of the waters is equally favourable to it. This compression is sometimes so considerable, that on the waters being drawn off by tapping, without proper precautions, a fainting has arisen from a sudden revulsion of the blood, from the head occasioned by the great quantity of humours rushing into the vessels which were before compressed and contracted by the weight upon them. Sometimes this compression reaches even to the kidneys themselves; and for that reason in two persons the swellings of whose abdomen I could not by any means diminish, the fluids entered into the kidneys in such small quantities that scarcely any urine came away. But it flowed very freely in those persons, the tumours of whose abdomen I had previously lessened by purgatives.

There are authors who pretend that not only a sparing use of drink, but an entire abstinence

abstinence from it is necessary in this complaint; and insist, that if any one attacked with a Dropsy should be inclined and able to bear the torture of the thirst, he may thereby save his life. How difficult a thing it is for persons in that situation to bear the thirst: the friend of the King Antigonus may serve as an example, who though guarded with the greatest care not only by his physician, but by the King, yet by eating his poultices, and by drinking his own urine, he hastened his death. How ineffectual and fruitless this method is, the very few instances recorded in medical books of persons cured by it, sufficiently show. Vanswieten quotes two, one from Marcellus Donatus, and another from Hildanus, besides the two mentioned by Dr. Mead. A very few others are spoken of by that excellent physician Donald Munro. Pliny related, that the Roman Knight Julius Viator, being restrained from liquids by his physicians, was freed from an anasarca. But these are all the examples of this sort which I have been able to learn, either by reading or observation: and these in the course of so many ages are so few, that to be cured of a Dropsy



fy by an entire abſtinence from drink, does not ſeem to be conformable to any general law of nature, but to be referred to ſome particular conſtitution or condition of the body, by which the inhalation of humidity by the pores of the ſkin which ordinarily takes place is prevented. For an abſtinence from drink is ſo far from preventing the accumulation of water in the body, that every author from the time of Hippocrates to the preſent period are full of obſervations, which ſhow that dropſical perſons though they have taken no drink, attract a large quantity of water from the atmosphere, and that by that means the abdomen has again become tumid, though the waters have been diſcharged from it. But here it may be aſked, if theſe things are ſo ; if humidity may be attracted in ſuch a quantity from the air as to feed and increaſe the diſeaſe ; why may not this fluid drawn in by the ſkin, perform the office of drink and promote the operation of medicines ? the cauſe of it appears to be this, that the humidity drawn in gradually by the pores of the ſkin, and deposited in the ſame gradual and ſlow manner in the cavities of the body  
is



is no way suited to give that plethora to the vessels which is requisite for promoting all the secretions. It has been before observed, that to bring off much urine a certain quantity of fluids joined with diureticks was requisite, in order that the blood might be brought to the emulgent arteries in an increased stream. The blood applied to the kidneys with diureticks in its ordinary state or volume, much less in the same quantity as in the Dropsy, is incapable of exciting a discharge of much urine, and Vanfwieten remarks as has been said, that unless drinks are taken with diureticks by persons in health, the urine will thereby be rendered more acrid, and the person will feel a more frequent inclination to make water, but there will by no means follow a more copious secretion of urine, which is the circumstance particularly wanted in the cure of a Dropsy.

But whatever explication these matters may have or may bear, little solicitous about theoretical comments, I think the following conclusions have been actually and indisputably established by what has been premised ;

fed; that to irritate the body by medicines, and to prohibit drink at the same time, is no less repugnant to the laws of Hippocrates, than prejudicial to the patient, and that those medicines are fruitless without drink, which with its assistance often succeed very happily. Moreover that the Dropsy will increase whether liquids be given, or whether the sick person abstains from them. Therefore, as the disease is very rarely cured by an abstinence from drink, and as medicines to cure it can neither be given with safety or success without it, the question proposed by that elegant scholar George Baker has my assent; nor is it without the best foundation that I believe, the treatment of Dropsies will be much more fortunate if the patient's importunate thirst be allayed by more large and more frequent draughts of diluting drinks than have commonly been administered.

E R R A T A.

Page

- 20, 3d Line "it" omitted.
- 22, line 10, for "meeting" read "meet."
- ibid. for "drinking" read "drink"
- 29, line 4, for "diseases" read "disease."
- 31, line 24, after misfortune read "is."
- 33, in the note after "observation" read "made."
- 36, line 21, for "ten" read, "five."
- 37, line 4, for "he" read "I."
- ibid. line 10, for "Cullen" read "Collin."
- 39, line 9, for "consist" read "consists"
- 42, line 21, for "we" read he."
- ibid. line 25, for "gives" read "gave."
- 44, line 1 of the note for "ζῆμα" read "σωμα."
- 45, line 1 of the note, for "Fæsius" read "Fœsius."
- 45, line 15 of the note for "οργιζαῖται" read "οργιζασθῆαι."
- ibid line 17 of the note for "πατασασιν" read "πατασασιν."
- 39, line 1st. dele "That."
- ibid 3d. for gives read "gave."
- ibid 4th. dele them.
- 75, line 18, for "εωλοισι" read "εωλοισι."
- 80, last line, for "strengthening" read "promoting."
- 114, line 25, dele "saline matters."
- 118, line 4, for "venal" read, "renal."
- 122 after "scholar" read "Sir."

